This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

HARVARD LAW LIBRARY
3 2044 053 587 309

Digitized by Google

Digitized by Google

7721 1750

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

U. S. Patent office. Library

CATALOGUE

OF

THE LIBRARY

OF THE

UNITED STATES PATENT OFFICE.

COMPILED UNDER AUTHORITY OF THE COMMISSIONER OF PATENTS.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1878.

B/U.S
O.P.C
UNI

Digitized by Google

Digitized by Google

PREFATORY NOTE.

The present volume is the first printed catalogue of the Patent Office Library since its organization, except a small classified list of some thirty pages, published in 1847,* when the Library consisted of a thousand volumes, the mere germ of what it has since become by the accumulations of more than forty years. It now contains some twenty-four thousand volumes, not including pamphlets and duplicate specifications of patents.

The labor of cataloguing having been in progress, at intervals, for a number of years, and by different hands, and the cumbrous card-catalogue being practically useless for general reference, the speedy publication of an index in some form was imperatively demanded; and it has been deemed best to issue it upon the present plan, although it was well known to be impracticable, under the circumstances, to secure that absolute uniformity so much desired in works of this kind.

The arrangement of this index by authors and subjects together has been made primarily, and almost exclusively, with a view to the special use for which the Library was designed: for easy reference by Examiners in the Patent Office and those interested in the examinations of claims for patents.

A few books deposited under copyright were retained when the transfer of the copyright Library was made to the Library of Congress, which will explain some of the more miscellaneous entries in a purely scientific or technical collection.

In the "Additions" will be found all accessions to the Library to April 30, 1878, besides many small pamphlets and a few other works omitted in the earlier cataloguing, which could only be inserted after the body of the catalogue had gone to press. The Law Library is given separately at the end of the volume.

This work, however imperfect, is an attempt to render more available this valuable collection of books, and, though greatly in advance of anything hitherto issued from the Library, is only to be regarded as a step toward something more perfect in the future, when a full subject-matter index shall be completed.

WESTON FLINT,
Librarian.

LIBRARY UNITED STATES PATENT OFFICE, *July* 1, 1878.

* The entire library was destroyed by fire in 1836.

S.20.77

Digitized by Google

EXPLANATIONS.

The types used in the following pages are as follows:—

Authors, full-faced, as:—**Abbott,** Henry L., etc.

First word entry, biography, and ordinary references, in antique, as:—**Annuaire** du cosmos, etc.; **Frémont,** John C., Life of. *See* **Upham,** C. W.

Subjects, antique caps, as:—**ACONITH,** etc.

Geographical names and references, Roman small caps, as:—ABBEVILLE, etc. *See* BOSTON. Public library.

References to volumes in a set, in antique, without the word *See*, as:—**Abridgments English Patents, No. 10.**; **Smiths'n contrib., v. 9.**; **9 Manuels Roret**; etc.

[In references to **Acad. roy. des sci.**; **Arts et métiers**, when two numbers of volumes are given, the former refers to the folio, the latter to the quarto edition.]

Digitized by Google

LIBRARY

OF THE

UNITED STATES PATENT OFFICE.

ALPHABETICAL INDEX.

A * * *. Pratique de l'art de chauffer par le thermosiphon ou calorifère à eau chaude. *Illus.* 8°. *Paris*, 1844.

AACHEN. Kgl. Westphälische Polytechnische Schule. Katalog der Bibliothek. 12°. *Aachen*, 1872.

——— ———. Programm. 8°. *Aachen*, 1871–74.

ABBEVILLE. Mémoires de la Société impériale d'émulation d'Abbeville. 8°. *Abbeville*, 1865–67.

Abbildungen von Turn-Uebungen, in 20 Tafeln. fol. 1868. *n. t. p.*

——— zur Krankenpflege im Felde. *See* **Gurlt**, E.

Abbot, Henry L. Report upon the Mississippi River. *See* **Humphreys**, A. A., and **Abbot**, H. L.

Abbott, Simon B. The southern botanic physician. 12°. *Charleston*, 1844.

Abel, C. D. The action of the patent laws in promoting invention. 8°. *London*, 1864. pp. 38.

Abele, Hyacinth. Die Violine, ihre Geschichte und ihr Bau. *Illus.* 12°. *Neuberg*, 1864.

Abercrombie, John. The hot-house gardener, etc. 8°. *London*, 1789.

Abhandlungen der kgl. technischen Deputation für Gewerbe. 1 Theil. *Illus.* fol. *Berlin*, 1824.

ABOLITION of patents, Recent discussions on the. *See* **Recent** discussions.

ABORTION, Criminal. *See* **Storer**, H. R., and **Heard**, F. F.

ABRIDGMENTS of English patents. *See* **Patents** and other privileges; *also,* GREAT BRITAIN. Great Seal Patent Office.

ACACIA tree, The. *See* **Withers**, W.

ACANTHUS, Guide for drawing the. *See* **Page**, I.

ACCLIMATION. Acclimatation et domestication des animaux utiles. *See* **Saint-Hilaire**, Isidore G.

ACCLIMATION. Zeitschrift für Acclimatisation. *See* BERLIN.

ACCOUNTANT, The national. *See* **Smith**, J. C., and **Jenkins**, F. W.

ACCOUTREMENTS. Abridgments English Patents, No. 10.

Accum, Frederick. Culinary chemistry. 12°. *London*, 1821.

——— Manuel théorique et pratique du brasseur. Traduit par M. Riffault et A. D. Vergnaud. 8°. *Paris*, 1828. **105 Manuels Roret.**

——— Practical treatise on gas-light. *Illus.* 8°. *London*, 1818.

——— A treatise on adulterations of food a d culinary poisons, exhibiting the fraudulent sophistications of beer, wine, tea, coffee, confectionery, and other articles employed in domestic economy, with me thods of detecting them. 12°. *London*, 1820.

——— **Parkes,** Samuel, and **Griffin,** J. Manuel de chimie amusante; traduit de l'anglais par A. D. Vergnaud. 18°. *Paris*, 1835. **6 Manuels Roret.**

Acharius, Erik. Lichenographiæ svecicæ prodromus. 8°. *Lincopiæ*, 1798.

ACHROMATIC microscopes, A treatise on. *See* **Beck**, Prichard.

ACIDS, alkalies, oxides, and salts. **Abridgments English Patents, No. 40.**

Ackerbau (Vom) und von dem Zustande der den Ackerbau treibenden Klassen in Irland und Grossbritannien. 2 Bde. 8°. *Wien*, 1840.

Ackland, William. How to take stereoscopic pictures, etc. 8°. *London*, 1857. pp. 33.

ACONITE. Properties of aconitum napellus. *See* **Fleming**, A.

ACOUSTICS. *See* **Bartlett**, W. H. C. Elements of natural philosophy.

——— Die Akustik grosser Räume. *See* **Orth**, A.

——— Die neueren Apparate der Akustik. *See* **Pisko**, Fr. Jos.

Digitized by Google

ACOUSTICS. Theory of sound in its relations to music. *See* **Blaserna,** Pietro. **International scientific series, v. 22.**

——— Wirkungen aus der Ferne. *See* **Dove,** Heinrich Wilhelm.

ACRIDIDÆ of North America. By C. Thomas. *See* UNITED STATES. **Interior** dept. Geolog. survey. F. V. Hayden.

ACTA. *See* **Transactions.**

Actæa [*pseud.*] *See* **Agassiz,** Elizabeth C.

ACTES. *See* **Transactions.**

Adam, Benno. Abbildungen der Rindviehracen und Schläge der Schweiz. 4°. *Bern,* 1849.

Adam, J. August. Kunst- und Gewerbeblatt, red. von. *See* MUNICH. **Polytechnischer** Verein.

Adams, Daniel. Book-keeping by single entry. 8°. *Keene,* 1849.

Adams, F. M. A treatise on the law of trade-marks. 8°. *London,* 1874.

Adams, George. Astronomical and geographical essays. 8°. *London,* 1789.

——— Essays on the microscope. 2d ed., with adds. by Fr. Kammacher. *Illus.* 4°. *London,* 1798.

——— Geometrical and geographical essays. 8°. *London,* 1803.

Adams, John. A system of astronomy. 18°. *New York,* 1848.

Adams, John Quincy. Reports upon weights and measures. 8°. *Washington,* 1821.

Adams, John S. A complete dictionary of five thousand musical terms—of Latin, Greek, Hebrew, Italian, French, German, Spanish and English. 12°. *Boston,* 1851.

——— New musical dictionary of fifteen thousand technical words, phrases, abbreviations, initials, and signs. 12°. *New York,* 1866.

Adams, William Bridges. English pleasure carriages, &c. *Illus.* 8°. *London,* 1837.

Adhemar, Alphonse Joseph. Révolutions de la mer; déluges périodiques. 8°. *Paris,* 1860.

Adie, Alexander. Description of the patent sympiesometer; or new air barometer. 8°. *Edinburgh, n. d.* pp. 8.

Adler, George J. A dictionary of the German and English languages. 2 parts: 1st. German and English; 2d. English and German. 8°. *New York,* 1853.

——— A dictionary of the German and English languages; abridged from the author's larger work. 12°. *New York,* 1852.

ADMIRALS, Lives of British. *See* **Southey,** R., and **Bell,** R. **Lardner's Cabinet Cyclopædia, vols. 70–74.**

Adorno, Juan Nepomuceno. Mélographie; ou nouvelle notation musicale. 4°. *Paris,* 1855. pp. 39.

Adts, N. Canons rayés; système Cavalli et Armstrong, avec leur projectiles et leur fusées, etc. *Paris,* 1861.

——— Des canons rayés. Recherches nouvelles sur les canons rayés et sur l'artillerie en général. 8°. *Paris,* 1862.

ADULTERATION of food, A treatise on. *See* **Accum,** Frederick.

——— in food and medicine. *See* **Hassall,** A. H.

ADULTERATIONS of food; by J. Scoffern. *See* **Gore,** G., **Sparling,** M., and **Scoffern,** J. **Orr's Circle of sciences, v. 7.**

——— Verfälschung der Nahrungsmittel u. s. w. *See* **Klencke,** H.

ADVERTISING. *See* **Men** who advertise.

ADVOCATE, The inventor's. *See* **Inventor's.**

Aelfrick's Anglo-Saxon homily. *See* **Klipstein,** Louis F.

AERIAL world, The. *See* **Hartwig,** G.

AERONAUTICA. *See* **Mason,** Monck.

AERONAUTICS. Abridgments English Patents, No. 41.

——— Experiments and adventures in the atmosphere. *See* **Turnor,** Hatton.

——— Die Luftschifffahrtskunde. *See* **Steinmann,** F. **166 Neuer Schauplatz der Künste.**

——— System of. *See* **Wise,** J.

AEROSTATICS. Des aérostats. *See* **Meller,** P.

AFRICA. Droits du Portugal sur les territoires de la côte occidentale d'Afrique. *See* **Sa da Bandeira,** *Vicomte* de.

——— Droits du Portgal sur les territoires de la côte occ dentale d'Afrique. *See* **Santarem,** *Vicomte* de.

——— Over de Afrikaansche vijge-boomen. *See* **Miquel,** F. A. W.

Agassiz, Elizabeth Carey. A first lesson in natural history, by Actæa [*pseud.*] 16°. *Boston,* 1859.

——— and A. E. R. Seaside studies in natural history; marine animals of Massachusetts bay; radiates. 8°. *Boston,* 1865.

Agassiz, Louis (John Rudolph). Classification of insects from embryological data. **Smithsonian contributions to knowledge, v. 6.**

Digitized by Google

Agassiz, Louis (John Rudolph). Lake Superior, its physical character, vegetation, and animals; with a narrative of the tour, by J. Elliot Cabot. 8°. *Boston*, 1850.

——— The structure of animal life. 8°. *New York*, 1866.

——— and **Gould,** A. A. Principles of zoölogy. 12°. *Boston*, 1851.

Agnew, William Fischer. The law and practice relating to letters patent for inventions. 8°. *London*, 1874.

Agricola, Georgius. Georgii Agricolæ Kempnicensis medici ac philosophi clariss. de re metallica libri xii. Quibus officia, instrumenta, machinæ ac omnia denique ad metallicam spectantia, etc. ita ob oculos ponuntur ut clarius tradi non possint, etc. fol. *Basileæ*, 1657.

AGRICULTURAL chemistry. *See* **Squarey,** Charles.

——— ——— Agriculturchemie. *See* **Goebel,** C. H. T. F.

——— ——— Cours de chimie agricole. *See* **Malaguti,** F.

——— ——— Discoveries in. *See* **Johnson,** C. W.

——— ——— Di Fortschritte der Agriculturchemie. *See* **Hoffmann,** R.

——— ——— Jahresbericht über die Fortschritte der Agriculturchemie. *See* **Hoffmann,** R.

——— ——— Lehrbuch der Agriculturchemie. *See* **Mayer,** Adolph.

——— ——— Principles of. *See* **Liebig,** Justus von.

——— engineering, Treatise on. *See* **Andrews,** G. H. **Weale's series, Nos. 63–65.**

——— exhibitions. Concours agricole universel de Paris en 1856. Liste des récompenses. *See* PARIS.

——— ——— Concours agricole universel de Paris en 1856. Contributions. États-Unis, Sardaigne, Toscane, Mexique. *See* PARIS.

——— ——— Concours des machines à moissonner. Rapport. *See* FOUILLEUSE.

——— ——— La Sicilia all'esposizione agraria di Parigi. *See* SICILY.

——— implements. Beschreibung der Ackerwerkzeuge. *See* **Rau,** L.

——— ——— Catálogo de instrumentos de agricultura. *See* Allen, A. B., and co.

——— ——— Catalogue des machines et instrumens. *See* Ransomes and Sims.

AGRICULTURAL implements, Catalogue of. *See* Allen, A. B., and co.

——— ——— Catalogue of. *See* Coyle, F.

——— ——— Catalogue of. *See* Mapes, C. V.

——— ——— Catalogue of. *See* Nourse, Mason and co.

——— ——— Catalogue of. *See* Ralph and co.

——— ——— Catalogue of. *See* Rapalje, J., and co.

——— ——— Description des instrumens d'agriculture. *See* **Thaer,** A.

——— ——— Farm implements. *See* **Thomas,** J. J.

——— ——— Geräthe und Maschinen für Landwirthschaft. *See* **Hamm,** W.

——— ——— Illustrirtes Maschinen-Verzeichniss. *See* **Burg,** A., and son.

——— ——— Implements of agriculture. *See* **Ransome,** J. A.

——— ——— Instrumens d'agriculture à l'exposition de Londres. *See* BELGIUM. *Add.*

——— ——— Landbouw-werktuigen. *See* **Jenken,** W.

——— ——— Landwirthschaftliche Geräthe der Londoner Ausstellung, 1851. *See* **Rau,** K. H.

——— ——— Landwirthschaftliche Geräthe Englands. *See* **Hamm,** W.

——— ——— Landwirthschaftliche Maschinen. *See* **Schneitler,** C. F., and **Andree,** J.

——— ——— Landwirthschaftliche Maschinen auf der Industrie-Ausstellung, 1862. *See* **Pintus,** J.

——— ——— Landwirthschaftliche Maschinen und Geräthe. *See* **Schneitler,** C. F.

——— ——— Landwirthschaftliche Maschinen und Geräthe. *See* **Schneitler,** C. F., and **Andree,** J.

——— ——— Landwirthschaftlicher Theil der Ausstellung zu Paris, 1855. *See* **Hamm,** W.

——— ——— List of machinery and implements. *See* Slight, J.

——— ——— Machines agricoles. *See* **Gaudry,** J.

——— ——— Machines d'agriculture. *See* **Borgnis,** J. A. **Mécanique appliquée aux arts, v. 5.**

——— ——— Manuel des instruments d'agriculture. *See* **Boitard,** P.

——— ——— Matériel agricole. *See* **Jourdier,** A.

——— ——— Mémoires sur les instruments aratoires. *See* **Valcourt,** L. P. de.

——— ——— Plough-wright's assistant. *See* **Gray,** A.

——— ——— Price-list of. *See* Bentall, E. H.

Digitized by Google

AGRICULTURAL implements. Price-list of. *See* Wedlake, M., and co.

——— ——— Prix-courant. *See* Dray, W.

——— ——— Rapport sur les descriptions des instrumens aratoires de Thaer. *See* **Héricart de Thury**, L. E. F.

——— ——— Rapport sur les instrumens aratoires. *See* **Héricart de Thury**, L. E. F.

——— ——— Trial of, at Geneva, 1852. *See* NEW YORK (state) agricultural society.

——— ——— Zeichnungen landwirthschaftlicher Maschinen. *See* **Lange**, J. C. E., and **Stegemann**, M.

——— machinery, Price current of. *See* Sinclair, R., jr., and co.

Agricultural (The) museum. v. 1. 8°. *Georgetown, Ca.*, 1811.

AGRICULTURE. Ackerbau in Irland und Grossbritannien. *See* **Ackerbau.**

——— Agriculture anglaise. *See* **Caird.**

——— Agronomie. *See* **Boussingault, M.**

——— Allgemeine Zeitung für deutsche Land- und Forstwirthe. *See* **Allgemeine** Zeitung.

——— American agriculturist. *See* **American.**

——— Anleitung zum praktischen Ackerbau. *See* **Schwerz**, Johann Nepomuck.

——— Annalen der deutschen Landwirthschaft. *See* **Annalen.**

——— Annalen der Landwirthschaft. in den Preussischen Staaten. *See* **Annalen**; *also*, PRUSSIA.

——— Annales d'agriculture. *See* LYONS. La société d'agriculture.

——— Annales de l'agriculture des colonies et des régions tropicales. *See* **Madinier**, M. Paul.

——— Annales de l'industrie: Mémoire sur l'agriculture. *See* **Le Normand**, L. S., and **Moléon**, J. G. V. de.

——— Applications of chemistry and geology to. *See* **Johnston**, J. F. W.

——— Archiv der deutschen Landwirthschaft. *See* LEIPSIC.

——— Berechnung der Feldsysteme. *See* **Wulffen**, Karl.

——— Bernische Blätter für Landwirthschaft. *See* BERNE.

——— Bibliotheca œconomica. *See* **Engelmann**, W.

——— Bibliothèque physico-économique. *See* **Bibliothèque.**

——— Der Boden und seine Benutzung im Kaiserstaate Oesterreich. *See* **Reden**, F. F. W. von.

AGRICULTURE, British. *See* **Donaldson**, J.

——— Bulletin de la classe d'agriculture de la Société des arts de Genève. *See* GENEVA. **Société** des arts.

——— Bulletin de la Société d'agriculture de la Sarthe. *See* LE MANS. Société d'agriculture.

——— Bulletin du conseil supérieur d'agriculture. *See* BELGIUM.

——— Centralblatt für die gesammte Landeskultur. *See* PRAGUE.

——— Chemistry applied to. *See* **Chaptal**, J. A.

——— Chemistry of. *See* **Christy**, D.

——— Communications relative to husbandry to the board of. *See* GREAT BRITAIN. Board of agriculture.

——— Country gentleman. *See* **Country.**

——— Cours d'agriculture. *See* **Cours.**

——— The cultivator. *See* **Cultivator.**

——— Die deutsche Landwirthschaft. *See* **Elsner**, J. G.

——— Dictionary of. *See* **Complete** farmer.

——— Dictionnaire de l'agriculture. *See* **Courtin**, E. M. P.

——— Dictionnaire de l'agriculture, etc. *See* **Laboulaye**, C. L.

——— Dictionnaire de l'industrie agricole. *See* **Baudrimont**, A., and others.

——— Elements of. *See* **Waring**, Geo. E., *jr.*

——— Elements of practical. *See* **Low**, D.

——— Encyclopädie der Landwirthschaft. *See* **Schnee**, G. K.

——— Encyclopædia of. *See* **Loudon**, J. C.

——— Encyclopédie de l'agriculture. *See* **Moll**, L.

——— Englische Landwirthschaft. *See* **Weckherlin**, A. von.

——— Die Entdeckung der wahren Pflanzennahrung. *See* **Schultz**, C. H

——— Essays and notes on. *See* **Ruffin**, Edmund.

——— Farmer's register. *See* **Farmer's.**

——— Feinde der Landwirthschaft. *See* **Nördlinger**, H.

——— Fünfundzwanzig Jahre Fortschritt auf dem Gebiete der Landwirthschaft. *See* **Settegast**, H.

——— Gardeners' chronicle and agricultural gazette. *See* **Gardeners'.**

——— Geschichte der teutschen Landwirthschaft. *See* **Anton**, C. G.

——— Grundzüge der Landwirthschaft. *See* **Hamm**, W.

Digitized by Google

AGRICULTURE. Handbuch des Ackerbaues. *See* **Müller,** C. E.

——— Journal d'agriculture. *See* **Journal.**

——— Journal für Landwirthe. Hannover. *See* **Journal,** etc.

——— Journal of. *See* **Journal.**

——— Journal of the Royal agricultural society of England. *See* LONDON. **Royal** agricultural society.

——— Königlich-physikalisch ökonomische Gesellschaft. Schriften. *See* KÖNIGSBERG.

——— Landwirthschaft des Oesterreichischen Kaiserthumes. *See* **Heintl,** Franz.

——— Landwirthschaft in Bayern. *See* BAVARIA.

——— Landwirthschaftlicher Central-Verein der Provinz Sachsen. Zeitschrift. *See* SAXONY.

——— Landwirthschaftlicher Verein in Bayern. Zeitschrift. *See* BAVARIA.

——— Die Landwirthschaftslehre, etc. *See* **Hlubek,** X. W.

——— Lehrbuch der Landwirthschaft. *See* **Pabst,** H. W. V.

——— Lehrbuch der landwirthschaftlichen Gewerbe. *See* **Otto,** F. J.

——— Magazine of. *See* **American** farmer.

——— Maison rustique. *See* **Maison.**

——— Management of hedge-row fences, etc. *See* **Harley,** W.

——— Manuel des habitants de la campagne, etc. *See* **Gacon-Dufour,** *Mme.* **69 Manuels Roret.**

——— Manuel du cultivateur. *See* **Thiébaut de Berneaud,** Arsenne. **44 Manuels Roret.**

——— Mémoires sur l'agriculture. *See* **Valcourt,** L. P. de.

——— Die nordamerikanische Landwirthschaft. *See* **Fleischmann,** C. L.

——— Nouveau cours d'agriculture. *See* **Nouveau.**

——— Nouvelles annales d'agriculture. *See* **Nouvelles.**

——— Ohio cultivator. *See* **Ohio.**

——— A pocket manual of. *See* **Farm,** The.

——— Practical. *See* **Partridge,** William.

——— Promenades d'un maître d'école, etc. *See* **Babo,** —, de.

——— Prontuario di agricultura general de Cuba. *See* **Bachiller y Morales,** Antonio.

——— Rapport sur les produits de l'agriculture exposés en 1849. *See* PARIS. Exposition, 1849.

——— Recueil agricole. *See* **Moléon,** J. G. V. de.

AGRICULTURE, Report of the commissioner of. *See* UNITED STATES. **Patent** office; *also,* **Dept.** of agriculture.

——— Rural essays. *See* **Downing,** A. J.

——— La science des campagnes. *See* **Ysabeau,** A.

——— Société d'agriculture de France. Bulletin. *See* FRANCE. **Société** d'agriculture.

——— Society for the encouragement of. *See* **Bath** and West of England.

——— Statistik der landwirthschaftlichen Industrie Böhmens. *See* **Schnabel,** G. N.

——— Terres cultivables, amendements et engrais. *See* **Baron,** L.

——— Thatsachen für Landwirthe. *See* **Robinson,** Solon.

——— Versammlung deutscher Land- und Forstwirthe. Bericht. *See* GERMANY.

——— Vierteljahresschrift für Landwirthschaft und Gewerbe. *See* **Artus,** W.

——— Wochenblatt für Land- und Forstwirthschaft. *See* STUTTGART.

——— Die Wunder der chemischen Felddüngung. *See* **Scharfenberg,** August.

——— Zeitschrift für die Landeskultur-Gesetzgebung der Preussischen Staaten. *See* PRUSSIA.

Agrippa, Henricus Cornelius. Henrici Cornelii Agrippæ in artem brevem Raymundi Lullii commentaria. 18°. *Coloniæ,* 1533.

——— Vanity of arts and sciences. 12°. *London,* 1676.

Agrippa, Henry Cornelius, Life of. *See* **Morley,** Henry.

Agronomische Zeitung. Organ für die Interessen der gesammten Landwirthschaft. Redigirt von Dr. Wilhelm Hamm. B. 10–15. 4°. *Leipzig,* 1855–60.

Agustin, Miguel. Libro de los secretos de agricultura, casa de campo, y pastoril. Traducido de lengua Catalana en Castellano por Fray Miguel Agustin, del libro que el mismo autor facò à luz el año de 1717. sm. 4°. *Barcelona,* 1722.

Ahlburg, Encyklopädie der Landwirthschaft, bearb. von. *See* **Schnee,** G. H.

Ahn, F. Ahn's introductory practical course to acquire the French language, by J. C. Oehlschlaeger. 8°. *Philadelphia,* 1854.

——— A new and easy method of learning the German language; 1st and 2d course. 2 v. 8°. *Philadelphia,* 1853.

——— A new, practical and easy method of learning the Italian language. 2d ed. 12°. *London,* 1857.

Digitized by Google

Aicard, J., and others. Patria. La France, ancienne et moderne, morale et matérielle; ou collection encyclopédique et statistique de tous les faits relatifs à l'histoire physique et intellectuelle de la France et de ses colonies. 12°. *Paris*, 1847.

AIDE-mémoire à l'usage des officiers d'artillerie. *See* FRANCE.

Aide-mémoire to the military sciences, framed from contributions of officers of the different services, and edited by a committee of the corps of royal engineers, in Dublin, 1845–52. *Illus.* v. 1–3. 8°. *London*, 1846–52.

AIDS to teachers and students in natural philosophy. *See* **Johnson,** Frank G.

Aiken, Arthur. Illustrations of arts and manufactures, being a selection from a series of papers read before the Society for the encouragement of arts, manufactures, and commerce. 16°. *London*, 1841.

Aiken, J. B. Treatise on the art of knitting, with a history of the knitting-loom, comprising an interesting account of its origin and recent improvements. 8°. *Franklin, N. H.*, 1861. pp. 32.

Aiken, John, and **Enfield,** W. General biography or lives, critical and historical, of the most eminent persons of all ages, countries, conditions, and professions. 10 v. 4°. *London*, 1799–1815.

Ainslie, Alex. Colvin. Smoking fires; their cause and cure. 8°. *London, n. d.*

Ainslie, Whitelaw. Materia Indica, or some account of articles employed by Hindoos and other eastern nations in medicine, arts and agriculture, with formulæ and practical observations. 2 v. 8°. *London*. 1826.

AIR, and its relations to life. *See* **Hartley,** Walter Noel.

——— as fuel. *See* **Ross,** Owen C. D.

——— engines. Notes sur les machines à gaz. *See* **Gerondeau,** Henri.

——— gas and other motive power engines. **Abridgments English Patents, No. 62.**

——— heat, and moisture, Relations of. *See* **Leslie,** John.

——— passages, Diseases of. *See* **Green,** Horace.

——— proofing. **Abridgments English Patents, No. 16.**

Airy, George Biddell. Astronomy. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.

Airy, George Biddell. Disturbance of the compass in iron ships. *See* **Tredgold,** F. **Steam** navigation. App's E and F.

——— On the undulatory theory of optics. New ed. 12°. *London and Cambridge*, 1866.

Aitken, William. The science and practice of medicine. 2d American from 5th London ed., adopting the new nomenclature of the Royal college of physicians of London. Additions by Meredith Clymer. *Illus.* 2 v. roy. 8°. *Philadelphia*, 1868.

Aitkin, W. C. Useful metals and their alloys. *See* **Scoffern,** J., and others.

Akerman, Richard. Studien über die Wärmeverhältnisse des Eisenhohofenprozesses mit besonderer Berücksichtigung auf den hierbei geübten Einfluss des erhitzten Windes. Uebersetzt und mit einem Vorworte begleitet von P. Tunner. *Illus.* 8°. *Leipzig*, 1872. pp. 69.

ALASKA. Catalogue of antiquities and curiosities. *See* **Fast,** Edward G. *Add.*

——— Travel and adventures in the territory. *See* **Whymper,** Frederick.

Alban, Ernst. The high pressure steam engine; an exposition of its comparative merits, and an essay towards an improved system of construction. Trans. from the German by William Pole. 28 plates. 8°. *London*, 1848.

——— Die Hochdruckdampfmaschine. *Illus.* 8°. *Rostock und Schwerin*, 1843.

ALBANY (N. Y.) The Dudley observatory and the scientific council; statement of the trustees. *See* **Dudley.**

——— Dudley observatory. Defence of Dr. Gould by the scientific council. *See* **Henry,** J., **Bache,** A., and **Peirce,** B.

——— Dudley observatory. Letters to the trustees. *See* **Thacher,** G. H.

——— Dudley observatory. Reply to the statement of the trustees. *See* **Gould,** B. A., *jr.*

Albee, F. T. A practical treatise on the cause, prevention, and treatment of consumption. 16°. *Pawtucket*, 1849.

Albites, Titus. Photographie simplifiée à l'aide du laboratoire. *See* **Photographie.**

Album de l'exposition de 1855. Association pour l'encouragement et le développement des arts industriels en Belgique. fol. *Bruxelles*, 1855.

Digitized by Google

Album der neuesten Londoner und Pariser Musterzeichnungen für Sattler, Riemer und Täschner und Wagenbauer. Nebst der nöthigen Erklärung und mit Angabe der Masse. In zwanglosen Heften. *Leipzig, Weimar*, 1846–53.

ALBUMEN. Die Eiweisskörper der Getreidearten, Hülsenfrüchte und Ölsamen. *See* **Ritthausen**, *Dr.* H.

Alcan, Michel. Dictionnaire des arts, etc. *See* **Laboulaye**, C. L.

——— Essai sur l'industrie des matières textiles. Texte, 8°. Atlas, l. 4°. *Paris*, 1847.

——— Fabrication des étoffes: études sur les arts textiles, à l'exposition universelle de 1867. Texte, 8°. Atlas, 4°. *Paris*, 1868.

——— Fabrication des étoffes; traité complet de la filature du coton, origines, productions, caractères, propriété, classifications, transformations, développement commercial, succédanés, progrès techniques, filature, apprêts des fils, détermination des assortiments, installation et organisation des filatures. Texte, 8°. Atlas, 4°. *Paris, Liége*, 1864–65.

Alcock, Thomas. Four lectures on zoölogy: delivered in the Carpenters' hall, Manchester, England. **Science lectures for the people, series 1.**

ALCOHOL and the constitution of man. *See* **Youmans**, Edward L.

——— Mémoire sur la densité de l'alcool. *See* **Pouillet.**

ALCOHOLOMETRY, Handbook of. *See* **Kupffer**, Adolph Th.

Alcott, William A. The laws of health, or the sequel to 'The house I live in.' 8°. *Boston*, 1857.

——— Vegetable diet as sanctioned by medical men and by experience in all ages, including a system of vegetable cookery. 2d ed. rev. 8°. *New York*, 1849.

——— The young woman's book of health. 12°. *Boston*, 1850.

Alden, Joseph. Elements of intellectual philosophy. 12°. *New York*, 1866.

Alembert, Jean Le Rond d'; **Condorcet,** Jacques; **De Marie de Caritat;** et **Bossut,** Charles. Nouvelles expériences sur la résistance des fluides. 8°. *Paris*, 1776.

Alessandro, D. Giuseppe d'. Pietra paragone de' Cavalieri. fol. *Napoli*, 1711.

Alexander, H. Kunst- und Gewerbe-Blatt, rev. *See* **Munich. Polytechnischer** Verein.

Alexander, J. H. Universal dictionary of weights and measures, ancient and modern, reduced to the standards of the United States of America. 8°. *Baltimore*, 1850.

Alexandria (Va.) Catalogue of the library. Founded 1794. 8°. *Washington*, 1856.

Alfing, Carl. Brunnenmeister. *See* **Janvier, —, and Biston, —.**

——— Die Schlangen-Feuerlösch-Spritzen. Theoretisch und practisch bearbeitet. 2e Aufl. 8°. *Weimar*, 1849. **129 Neuer Schauplatz der Künste.**

Alford, Henry. Criticism on the dean's essays on the queen's English. *See* **Moon**, G. Washington.

——— A plea for the queen's English; stray notes on speaking and spelling. 16°. 10th ed. *London and New York*, 1866.

ALGÆ. Nereis Boreali-Americana; by W. H. Harvey. **Smiths'n contrib., v. 3, 5, 10.**

ALGEBRA. *See* **Harney**, J. H.

——— Elementary. *See* **Davies**, Charles.

——— Elementary treatise on. *See* **Robinson**, H. N.

——— Elementary treatise on. *See* **Ryan**, James.

——— Elements of. *See* **Clark**, Davis W.

——— Elements of. *See* **Davies**, Charles.

——— Elements of. *See* **De Morgan**, Augustus.

——— Elements of. *See* **Hammond**, Nathaniel.

——— Elements of. *See* **Loomis**, Elias.

——— Lessons in. *See* **Kirkman**, T. P. **Weale's series, No. 105.**

——— Manuel d'algèbre. *See* **Ferqueur**, O. **9 Manuels Roret.**

——— Theoretical and practical. *See* **Robinson**, H. N.

——— Treatise on. *See* **Chase**, S.

——— Treatise on. *See* **Hackley**, Charles W.

——— Treatise on. *See* **Loomis**, Elias.

——— Treatise on. *See* **Sestini**, B.

——— University. *See* **Davies**, Charles.

ALGEBRAICAL problems. *See* **Bland**, M.

Algiers. L'Algérie à l'exposition de 1862. 8°. *Alger, n. d.*

——— Annales de la colonisation algérienne. *See* **Annales.**

Digitized by Google

ALGIERS. Explorations scientifiques de l'Algérie pendant les années 1840-1-2. Sciences historiques et géographiques. T. 3. roy. 8°. *Paris*, 1853.

——— Revue algérienne et coloniale. *See* **Revue.**

——— Tableau de la situation des établissements français dans l'Algérie, 1856-1858. 4°. *Paris*, 1859.

ALHAMBRA court in the crystal palace. *See* **Jones, O. Crystal palace library, v. 1.**

Alianelli, Niccola. Della riabilitazione de' condannati. 8°. *Napoli*, 1863.

——— Instituzione di diritto commerciale secondo il codice italiano di commercio. 2 v. 8°. *Napoli*, 1866-67.

ALKALIES. Abridgments English Patents, No. 40.

Allain, P. A. Traité de chimie élémentaire d'après les équivalents, ayant l'hydrogène pour unité. *Illus.* 8°. *Paris*, 1848.

Allen (Anthony B.) **and co.** Catalogue of agricultural and horticultural implements; of field and garden seeds; fruit and ornamental trees, domestic animals, etc. 8°. *New York*, 1851.

Allen, David O. India, ancient and modern, geographical, historical, political, social and religious; with account of the state and prospects of christianity. 8°. *Boston, Cleveland, O., New York, London*, 1856.

Allen, Enos G., Interference between H. W. Farley and the assignees of. *See* **Mason, C.**

——— Interference between the application of H. W. Farley and the patent of Allen; argument of counsel. *See* **Robb, J. B.**

Allen, J. Adams. Medical examinations for life insurance. roy. 8°. *Chicago*, 1847.

Allen, J. Fisk. A practical treatise on the culture and treatment of the grape-vine, embracing its history, directions for its treatment in the United States, in the open air, and under glass, with and without artificial heat. 2d ed. enlarged. 8°. *Boston*, 1848.

Allen, J. M. Practical anatomist; or the student's guide in the dissecting room. 8°. *Philadelphia*, 1856.

Allen, Lewis F. American cattle; their history, breeding, and management. 12°. *New York*, 1868.

Allen, R. H., y compa. Catálogo ilustrado y razonado de instrumentos agricolas y de horticultura, maquinaria en general, ferretaria, &c. 8°. *Nueva York*, 1868.

Allen, William F. and Joseph H. Latin lessons adapted to the Latin grammar. 12°. *Boston*, 1869.

——— Manual of Latin grammar. 8°. *Boston*, 1868.

Allen, Zachariah. Philosophy of the mechanics of nature, and the source and modes of action of natural motive power. *Illus.* 8°. *New York*, 1852.

Allgemeine illustrirte Industrie-Kunst-Zeitung. 6 Bde. in 3. [B. 1, 2, 3, are entitled 'Weltausstellungs-Zeitung'.] Hrsg. von F. Springmühl. fol. *Leipzig und Wien*, 1872-74.

——— landwirthschaftliche Zeitung, Organ für Feld- und Gartenbau, Forstwesen, Obstbaumzucht, etc. Jahrgang 1860-1861. 4°. *Leipzig*, 1860-61.

——— polytechnische Zeitung und Handlungs-Zeitung für 1838-39, '40, '42. 3 Bde. *Nürnberg*, 1838-42.

——— Zeitung für die deutschen Land- und Forstwirthe. Unter vielseitiger Mitwirkung hrsg. von C. H. Ch. Kerndt. Jahrg. 29-33. 4°. *Leipzig*, 1852-56.

Allgemeines Journal für Industrie, Handel und Schifffahrt. Jahrg. 4-7. 4°. *Hamburg und Leipzig*, 1841-44.

Allibone, S. Austin. Critical dictionary of English literature, and British and American authors, living and deceased, from the earliest accounts to the middle of the nineteenth century. 3 v. roy. 8°. *Philadelphia*, 1859-74.

ALLOYS. Abridgments English Patents, No. 18.

——— Useful metals and their alloys. *See* **Scoffern, J., and others.**

Allston, Washington. Lectures on art, and poems; ed. by Rich'd Henry Dana, jr. 12°. *New York*, 1850.

ALMANAC, American, and repository of useful knowledge. *See* **American** almanac.

——— American photographic; being an annual appendix to Humphrey's Journal of photography, and the allied arts and sciences. *See* **Towler, J.**

——— The British. *See* LONDON. **Society** for the diffusion of useful knowledge.

Digitized by Google

ALMANAC. Haus- und Landwirthschafts Kalender. *See* BAVARIA.

——— Illustrirter Kalender für die deutschen Haus- und Landwirthe. *See* **Illustrirter.**

——— Illustrirter Weinbau-Kalender für das Schaltjahr 1872. *See* **Babo,** A. W. v.

——— Jahrbuch der Ereignisse, Bestrebungen und Fortschritte im Völkerleben und im Gebiete der Wissenschaften, Künste und Gewerbe. *See* **Illustrirter.**

——— Kalender für den Sächsischen Berg- und Hüttenmann. *See* FREIBERG.

——— Kalender, statistisches Jahrbuch für Königreich Sachsen. *See* KALENDER.

——— Landwirth. Hülfs- und Schreib-Kalender. *See* **Mentzel** und v. Lengerke.

——— The national. *See* **National** almanac.

Almanach de Gotha. Annuaire diplomatique et statistique pour l'année 1869, 1873, 1874. 24°. *Gotha*, 1869–74.

ALMANACS, Book of. *See* **De Morgan,** Augustus.

ALPHABETS, Book of ornamental. *See* **Delamotte,** F.

——— Illuminated. **Tymms,** W. R. The art of illuminating.

ALPS, Glaciers of. *See* **Tyndall,** J.

Alston, J. W. Hints to young practitioners in the study of landscape painting; with instructions in the art of painting on velvet. 8°. *Edinburgh*, 1804.

ALTENBURG. Mittheilungen aus dem Osterlande; 10 Nos., 13er Bd., 1855, 18er Bd., 1868. 8°. *Altenburg*, 1855–68.

Althaus, Ernst. Zusammenstellung der statistischen Ergebnisse des Bergwerks-, Hütten- und Salinen-Betriebes in dem Preussischen Staate während der zehn Jahre von 1852 bis 1861. 4°. *Berlin*, 1863.

Note.—Bound with B. 10, Zeitschrift für das Berg- Hütten- und Salinenwesen.

Altmüller, G. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

ALUMINIUM. L'aluminium, ses propriétés, etc. *See* **Sainte-Claire Deville,** H.

——— L'aluminium et les métaux alcalins. *See* **Fissier,** C. and A.

Alvord, Benjamin. Tangencies of circles and spheres. **Smiths'n contrib., v. 8.**

Alwens, Friedrich. Real-Index zum Kunst- u. Gewerbe-Blatt; Jahrg. 1815–46. *See* MUNICH.

AMAZON river. Voyage dans l'Amérique méridionale, avec une carte du Maragnon, etc. *See* **La Condamine.**

Ambrose, Saint. Beati Ambrosii episcopi mediolanensis opusculum quod Hexameron vocitatur. Per. Johannem Schusler, imperialis urbis Augustæ impressum. fol. 1472.

AMBROTYPE, The. *See* **Seeley,** Charles A.

——— manual. *See* **Burgess,** N. G.

AMERICA. American sportsman. *See* **Lewis,** E. J.

——— and Asia, Across. *See* **Pumpelly,** Raphael.

——— Bibliographical guide to American literature. *See* **Trübner,** N.

——— Catalogue of American publications. *See* **Roorbach,** D. A.

——— Certain storms in Europe and America, Dec., 1836, by E. Loomis. **Smiths'n contrib., v. 11.**

——— Commercial and financial legislation of Europe and America. *See* **Macgregor,** J.

——— Descriptive hand book. *See* **Bacon,** Geo. Washington.

——— French and American tariffs compared. *See* **Carey,** H. C.

——— History of American manufactures. *See* **Bishop,** J. L.

——— History of clock and watchmaking in America. *See* **Booth,** M. L. Clock and watchmakers' manual.

——— History of printing. *See* **Thomas,** J.

——— Memoirs of American governors. *See* **Moore,** J. B.

AMERICA, NORTH, Atlas of. *See* **Morse,** S. E.

——— Civil engineering of. *See* **Stevenson,** D.

——— Entomology. *See* **Say,** T.

——— Fluctuations of level in the North American lakes: by C. Whittlesey. **Smiths'n contrib., v. 12.**

——— Fresh water fishes: by C. Girard. **Smiths'n contrib., v. 3.**

——— Hunting and shooting. *See* **Hawker,** P.

——— Memoir on the extinct sloth tribe of: by J. Leidy. **Smiths'n contrib., v. 7.**

——— Nereis Borealis Americana: by W. H. Harvey. **Smiths'n contrib., v. 3, 5, and 10.**

——— Oölogy of; by T. M. Brewer. **Smiths'n contrib., v. 11.**

——— Residence in the great deserts of. *See* **Domenech,** E.

——— Travels in. *See* **Lyell,** *Sir* C.

Digitized by Google

AMERICA, NORTH. Vertebrata; by J. Jones. **Smiths'n contrib., v. 8.**

——— Notes and queries concerning the antiquities, etc., of. *See* **Historical** Magazine.

——— Resources and prospects of. *See* **Peto**, *Sir* S. Morton.

AMERICA, SOUTH. Illustrations in South American arts. *See* **Ewbank, T.** Life in Brazil.

AMERICAN Academy of arts and sciences, Memoirs of. *See* BOSTON.

——— almanac and repository of useful knowledge, 1830-1861. 31 v. 12° *Boston and New York*, 1830. [Vol. for 1858 missing.]

——— and European druggists' directory, 1858-59, containing the names and places of business of the wholesale and retail druggists, etc. 2 v. in 1. 12°. *New York*, 1858.

——— and European railway practice. *See* **Holley**, A. L.

——— angler's guide; or a complete fisher's manual for the United States. *Illus.* 3d ed. rev. 12°. *New York*, 1849.

——— annual cyclopædia and register of important events of 1861-1875. 8°. *New York*, 1863-76.

Note.—The volume for 1875 is entitled "Appleton's annual cyclopædia."

——— artisan and patent record; a weekly journal of arts, mechanics, manufactures, mining, engineering and chemistry; and repertory of patents. 18 v., 3 series: 1st, v. 1, 1864-65, fol.; 2d, v. 1-14, 1865-72, 4°; 3d, v. 1-3, 1872-73, fol. *New York*, 1864-73.

——— association for the advancement of science; proceedings. 13 v. 8°. *Philadelphia*, 1849-60.

——— association for the promotion and advancement of science. Proceedings of 16th meeting, at Burlington, Vt., Aug., 1867. roy. 8°. *Cambridge*, 1868.

——— bee journal, The; ed. by Samuel Wagner. 8°. v. 1-10. *Philadelphia*, 1861-74.

——— biography. *See* **Sparks**, Jared.

——— booksellers' trade list. *See* **Blake**, Alexander V.

——— boy's book of sports and games; a repository of in and out doors amusements for boys and youth. *Illus.* 12°. *New York*, 1864.

——— chemist. *See* **Chandler**, C. F. and W. H.

AMERICAN cyclopædia. *See* **Ripley**, George, and **Dana**, Charles. [Two editions.]

——— dental association; transactions of the 5th annual meeting, Chicago, 1865, and 6th annual meeting, Boston, 1866. 8°. *Boston*, 1868.

——— department of the Vienna exhibition; 1873. *See* VIENNA.

——— edition of the encyclopædia, or dictionary of arts, sciences, and miscellaneous literature. *See* **Encyclopædia.**

——— encyclopædia, The new and complete. *See* **Encyclopædia** Americana.

——— engineer. *See* **Byrne**, Oliver.

——— farmer; a monthly magazine of agriculture and horticulture. 8°. *Baltimore, Md.*

Note.—This set contains: 1st ser., v. 1-15, 1819-34; new 3d ser., v. 2, 3, 1846-48; 4th ser., v. 11-14, 1855-59; 5th ser., v. 1-3, 1859-61.

——— farmer's hand book; new and universal hand book containing complete instructions regarding the treatment of soils, the operations of productive field husbandry, planting and cultivation of the different kinds of roots, grains, grasses, sugar cane, cotton, tobacco, rice, tea, etc., with an appendix and tables for the measurement of land, etc. 8°. *Philadelphia*, 1860.

——— form book and legal guide, by a member of the Cincinnati bar. 8°. *Cincinnati*, 1852.

——— fowl-breeder, by an association of practical breeders. 18°. *Boston*, 1850.

——— gallery of art. *See* **Sartain**, J.

——— gas light journal; devoted to light, water-supply, and sewerage. v. 1-23, 1859-76. fol. *New York*, 1859——.

——— girl's book. *See* **Leslie**, Eliza.

——— grape-culture and wine-making. *Illus.* *See* **Mead**, Peter B.

——— horological journal. 2 v. sm. 4°. *New York*, 1870.

——— horticultural annual. A year-book of horticultural progress, etc. 3 v. 18°. *New York*, 1868.

——— house carpenter and joiner's assistant. *See* **Gould**, Lucius D.

——— Institute, Journal of. *See* NEW YORK CITY.

——— journal of dental science; ed. by Chapin A. Harris and others; devoted to original articles, reviews of dental publications, the latest improvements in surgi-

Digitized by Google

American—Continued.

cal and mechanical dentistry, and biographical sketches of distinguished dentists. *Illus.* 20 v. 8°. *New York*, 1839–60.

——— journal of education; ed. by Henry Barnard. 17 v. 8°. *Hartford*, 1856–67.

——— journal of improvements in the useful arts, and mirror of the patent office; containing authentic descriptions and illustrative drawings of the records, specifications and models of the patent office. Monthly. Jan.-June. No. 1–6. v. 1. 4°. *Washington*, 1846. *2 copies.*

——— journal of the medical sciences. 1st series, v. 24–26, 1839–41. 2d series, v. 1–72, 1842–76. 8°. *Philadelphia*, 1839——.

——— journal of mining, milling, oil-boring, geology, mineralogy, metallurgy, etc., ed. in part by George Francis Dawson. 7 v. fol. *New York*, 1866–69.

——— journal of pharmacy. v. 3–46, 1831–76. 8°. *Philadelphia*, 1831——.

Note.—v. 2–6 are entitled "Journal of the Philadelphia college of pharmacy." General index from its commencement in 1830 to 1850 bound with vol. 21. Also 2d general index to 1870.

——— journal of photography and the allied arts and sciences, ed. by Chas. A. Seely. 8°. *New York.* [Set imperfect.]

——— journal of science and arts, by Benj. Silliman, sen., and others. 1st series, v. 1–49, (v. 50, index), 1819–45. 2d series, v. 1–49, (v. 50, index), 1846–70. 3d series, v. 1–12, 1871–76. 8°. *New Haven*, 1819——.

——— law, Analysis of. *See* **Moulton**, Joseph W.

——— library of dental science. 11 vols. 8°. *New York and Baltimore*, 1838–49.

Vol. 1. Structure of the teeth.—Burdell. Natural history of teeth.—Hunter.
Vol. 2. Dentologia.—Brown. First dentition.—Baumes.
Vol. 3. Dental surgery.—Koecker.
Vol. 4. Researches on the teeth.—Nasmyth. Diseases of the mouth.—Gariot.
Vol. 5. Dental surgery.—Lefoulon.
Vol. 6. Deformity of teeth and gums.—Berdmore. Anatomy of the teeth.—Jobson.
Vol. 7. Anatomy of the dental system.—Blandin. Second dentition.—Delabarre. Teeth.—Waite.
Vol. 8. Science of the dentist.—Desirabode.
Vol. 9. Teeth in man and animals.—Blake.
Vol. 10. Diseases of the mouth.—Jourdain.
Vol. 11. Dental medicine.—Bond.

AMERICAN literary gazette. *See* **American** publisher's circular.

——— manufacturers; catalogue and journal of the 10th exhibition held in Boston, Sept. 20 to Oct. 11, 1865. 8°. *Boston*, 1865.

——— manufactures, History of. *See* **Bishop**, J. Leander.

——— mechanics' magazine, in 2 v. *New York*, 1825–26.

——— museum and repository of arts and sciences, containing a list of all patents granted by the U. S. up to 1821; also a list of all the books deposited in the department of state for securing copyright according to law. 8°. *Washington*, 1822.

——— naturalist, The; ed. by A. S. Packard, E. S. Morse, A. Hyatt, and F. W. Putnam. v. 1–7. 8°. *Salem*, 1869–73.

——— oracle, The. *See* **Stearns**, Samuel.

——— patent system. *See* **Howson**, H. and C.

——— pharmaceutical association, Proceedings of, at the 7th annual meeting, Washington, D. C., Sept., 1858, with constitution and list of members. 8°. *Philadelphia*, . . . 1858. Also 9th meeting, 1860, New York. *Philadelphia*, 1860.

——— philosophical society. *See* PHILADELPHIA.

——— photographic almanac. *See* **Towler**, John.

——— polytechnic journal; a new monthly periodical devoted to science, mechanical arts, and agriculture. 4 v. 8°. *Washington*, 1853–54.

——— publishers' circular and literary gazette; semi-monthly. 18 v. 8°. *Philadelphia*, 1863–71.

——— railroad journal; steam navigation, commerce, finance, insurance, banking, mining, manufactures; ed. by Henry V. Poor, John H. Schultz, and others. v. 1–49, 1831–76. 4° and 8°. *New York*, 1831–76——.

——— railway review, devoted to engineering, public works, steam machinery, finance, and patents. v. 1–5 and part of 6. fol. and 4°. *New York*, 1859–62.

——— repertory of arts, sciences, and manufactures. *See* **Mapes**, James J.

——— rose culturist, The. 12°. *New York*, 1852. **Santon's cottage and farm library.**

——— The scientific. *See* **Scientific** American.

Digitized by Google

AMERICAN travel. *See* **Appleton's** hand book.

——— travelling sketches; on industry, agriculture, and social life. *See* **Parker**, Ludwig.

——— veterinary journal, devoted to the diffusion of veterinary knowledge. Geo. H. Dadd, ed. 3 v. 8°. *Boston*, 1856–58.

——— year-book, The, and national register for 1869. *See* **Camp**, David N.

AMERICANISMS, Dictionary of. *See* **Bartlett**, J. R.

——— Glossary of supposed. *See* **Elwin**, Alfred L.

AMIENS. La bibliothèque communale de la ville d'Amiens. Catalogue méthodique. Polygraphie, histoire littéraire, bibliographie. 8°. *Amiens*, 1873.

——— La Société des antiquaires de Picardie. Documents inédits concernant la province. T. 5–8. 4°. *Amiens*, 1865–71.

——— ——— Mémoires. 2e série. v. 1–10. *Paris et Amiens*, 1851–65.

——— ——— Mémoires. 2e série. Table générale des matières contenues dans les dix volumes de. 8°. *Amiens*, 1865. 2 copies.

——— ——— Notice des tableaux et objets d'art d'antiquité et de curiosité, exposés 1860. 8°. *Amiens*, 1860.

——— ——— Statuts et réglement de. 8°. *Amiens*, 1863.

Ammann, Alois, Kunst- and Gewerbeblatt, red. v. *See* MUNICH.

Ammann, August. Die Pflanzenkrankheiten für Land- und Forstwirthe, Lehrer, Gärtner, etc. 8°. *Stuttgart*, 1867.

AMMONIA-cobalt bases, by W. Gibbs and F. A. Genth. **Smiths'n contrib., v. 9.**

——— Fabrikation des Ammoniaks. *See* **Rösling**, C. W.

AMMUNITION. Abridgments English Patents, No. 10.

——— Carabines de guerre et leurs balles. *See* **Charvin.**

——— La fabrication et l'emploi des munitions de l'infanterie. *See* **Masquelez.**

——— Rifle. *See* **Hawes**, A. B.

——— Treatise on; printed by order of sec. of state for war. 8° *London*, 1874.

Amos, Sheldon. The science of law. **International scientific series, v. 10.**

Amouroux, Jules. Practical draughtsman. *See* **Armengaud**, J. E.

AMPHIBIA. Beschreibung der Amphibien. *See* **Helmuth**, Johann Heinrich.

AMPHIBIANS, Natural history of. *See* **Swainson**, W. **Lardner's Cabinet Cyclopædia, v. 117–118.**

AMPUTATIONS, and artificial limbs. *See* **Grossmith**, W. R.

Amtlicher Bericht über die XVIII. Versammlung deutscher Land- und Forstwirthe zu Prag in Sept. 1856. Hrsg. von Frantz Xav. Assenbaum. roy. 8°. *Prag*, 1857.

AMUSEMENTS. *See* **Every** little boy's book.

——— *See* **Wagner**, Herman, and **Leake**, Marie.

——— Les amusemens de la campagne. *See* **Paulin Desormeaux**, A. C.

——— Athletic and gymnastic exercises. *See* **Howard**, J. H.

——— Athletic sports and recreations for boys. *See* **Wood**, J. G.

——— Boy's own book. *See* **Boys.**

——— The boy's own toy-maker. *See* **Landells**, E.

——— The girl's own book. *See* **Child**, Lydia Maria.

——— The home book. *See* **Valentine**, R.

AMUSING, The art of. *See* **Bellew**, Frank.

ANÆSTHESIA, Modern. *See* **Smith**, Truman.

ANÆSTHETICS, Chloroform and other. *See* **Snow**, John.

ANALYSIS. Cours d'analyse de l'École polytechnique. *See* **Duhamel**, M.

ANALYSIS, Qualitative. Tabellen zur qualitativen Analyse. *See* **Closser**, Alexander.

——— Quantitative chemical. *See* **Rose**, H.

——— Résumé des leçons d'analyse données à l'École polytechnique. *See* **Navier**, M.

Anatomical remembrancer: a complete pocket anatomist. 2d Amer. from 4th Lond. ed., with additions by E. E. Isaacs. 24°. *New York*, 1855.

ANATOMIST, The practical. *See* **Allen**, J. M.

ANATOMY and hygiene, Human. *See* **Lambert**, T. S.

——— and physiology, Human. *See* **Hartshorne**, Henry.

——— Comparative, etc. *See* **Tulk**, Alfred.

——— General and special. *See* **Wilson**, Erasmus.

——— Human. *See* **Quain**, Jones.

——— Human. *See* **Wilson**, Erasmus.

——— A manual of pathological. *See* **Jones**, C. H., and **Sieveking**, E. H.

Digitized by Google

Anatomy of dress: by a modern epicurean. 18°. *Glasgow*, 1837. pp. 36.

——— Pathological. *See* **Jones**, C. Handfield.

——— Special, and histology. *See* **Horner**, William E.

——— Die statistischen Momente der menschlichen Gliedmassen. *See* **Harless**, E.

——— Stellung und Bedeutung der pathologischen Anatomie. *See* **Bühl**, L.

——— Text book of. *See* **Handy**.

ANCHORS. Fabrique des ancres, par R. A. F. de Réaumur, avec des additions par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sc., arts et métiers, v. 8; also 15.**

——— Treatise on ship's. *See* **Cotsell**, G.

Anderson, Charles Frederick. American villa architecture, 1853: containing plans and elevations, with descriptions, etc., and an essay on architecture. *Illus.* l. 4°. *New York.*

Anderson, Elbert. The skylight and the dark room: a comple text book on portrait photography; containing the outlines of hydrostatics, pneumatics, acoustics, heat, optics, chemistry, and system of the art photographic. *Illus.* 8°. *Philadelphia*, 1872.

Anderson, J. Corbet. The Roman city of Uriconium at Wroxeter, Salop: illustrative of the history and social life of our Romano-British forefathers. 12°. *London*, 1867.

Anderson, Robert. Making rockets; experimentally and mathematically demonstrated. 24°. *London*, 1696. pp. 48.

Anderson, Thomas. Elements of agricultural chemistry. 12°. *Edinburgh*, 1860

Anderson, William Sketch of the mode of manufacturing gunpowder at the Ishapore mills in Bengal; record of experiments to ascertain the value of charge, windage, vent, weight, etc., in mortars and muskets. Notes by Lieut.-Col. Parbly. roy. 8°. *London*, 1862.

André, Rudolph. Darstellung der vorzüglichsten landwirthschaftlichen Verhältnisse, verfasst von, und mit Anmerkungen von A. Rieger. 8°. *Prag*, 1846.

Andree, Julius. Landw. Maschinen. *See* **Schneitler**, C. T.

Andrews, Ethan Allen; a copious and critical Latin-English lexicon, founded on the larger Latin-German lexicon of William Freund. 8°. *New York*, 1855.

Andrews, E. A., and **Stoddard,** S. Grammar of the Latin language. 12°. *Boston*, 1857. 65th ed.

Andrews, G. H. Modern husbandry: a practical and scientific treatise on agriculture, including draining, etc. 8°. *London*, 1853.

——— Rudimentary treatise on agricultural engineering. 3 v. Vol. 1. Buildings. 2. Motive powers, and machinery of the steading. 3. Field machines and implements. 12°. *London*, 1852-53. **Weale's series, Nos. 63-65.**

Andrews, Israel D. Report on the trade of the British North American colonies. *See* UNITED STATES.

Andrews, S. P., and **Boyle,** Augustus F. Phonographic word book, No. 1-2. 18°. *New York*, 1849.

——— ——— Phonographic reader; a complete course of inductive reading lessons in phonography. 3d ed. 18°. *Boston*, 1846.

Andrews, William D. Decision on application of Andrews for extension of his patent. *See* **Thomas**, P. F.

Andry, Felix. Manual of diagnosis of diseases of the heart; preceded by clinical researches for the study of these affections. Trans. from the French, by Samuel Kneeland, jr. 8°. *Boston*, 1846.

ANEROID barometer, Treatise on. *See* **Dent**, E. J.

ANGELIC wisdom. *See* **Swedenborg**, Emanuel G.

Angell, James B. Solution of India rubber; trans. by. *See* **Luedersdorff**, F.

ANGERS. Mémoires de la Société nationale et impériale d'agriculture sciences et arts d'Angers. 18 v. 8°. *Angers*, 1831-66.

ANGLER, The complete. *See* **Walton**, Isaac, and **Cotton**, Charles.

ANGLING. American angler's guide. *See* **American.**

——— American angler's own book, etc. *See* **Norris**, Thaddeus.

——— Angler's assistant. *See* **Carpenter**, W.

——— Hand book of. *See* **Ephemera.**

——— La pêche à la ligne. *See* **Paulin Desormeaux**, A. C.

Anglo-Saxon derivatives, A hand book of, by a literary association. 12°. *New York*, 1854.

——— language, A comparative grammar of. *See* **March**, Francis A.

Digitized by Google

Anglo-Saxon language, A dictionary of. *See* **Bosworth**, J.

—— language, A grammar of. *See* **Klipstein**, Louis F.

—— A manual of. *See* **Shute**, Samuel M.

—— orthography, A handbook of. 2 parts. 1. Orthography and its materials. 2. Studies in Anglo-Saxon orthography. By a literary association. 12°. *New York*, 1852.

—— Root-words. 3 parts. 1. Instructions about Anglo-Saxon root-words, 2. Studies in Anglo-Saxon root-words. 3. The beginnings of the root-words. By a literary association. 12°. *New York*, 1853.

ANILINE. Das Anilin und die Anilin-Farben. *See* **Jordan**, August.

—— Die Anilin-Farbstoffe, etc. *See* **Geisler**, A.

—— Die Entwicklung der Anilin-Industrie, die Anilin-Farben, etc. *See* **Vogel**, *Dr.* Max.

—— Das Gesammte der Färberei und Druckerei mit Anilin-Farbstoffen auf Wolle, Baumwolle und Seide. *See* **Beckers**, A.

—— Gewinnung von Farbestoffen des Anilins. *See* **Oppler**, T.

—— Metallhaltige Anilinderivate. *See* **Schiff**, H.

—— Recept-Taschenbuch der Anilinfarben-Technik. *See* **Winckler**, Ferdinand.

—— Theorie und Anwendung von Anilin. *See* **Krieg**, L. J.

ANIMAL biography; or authentic anecdotes of the lives, etc., of the animal creation. *See* **Bingley**, W.

—— bodies, Chemistry of. *See* **Thomson**, Thomas.

—— chemistry. Anleitung zur qualitativen und quantitativen zoochemischen Analyse. *See* **Gorup-Besanez**, E. v.

—— chemistry. Jahres-Bericht über die Fortschritte der Thier-Chemie. *See* **Maly**, Richard.

—— kingdom illustrated. *See* **Goodrich**, S. G.

—— life, Curiosities of. *See* **Curiosities.**

—— life, Lectures on the structure of. *See* **Agassiz**, Louis.

—— locomotion, or walking, swimming, and flying, with a dissertation in aëronautics. By J. Bell Pettigrew. **International scientific series, v. 8.**

—— mechanics. *See* **Bell**, *Sir* C.

ANIMAL mechanics, The principles of. *See* **Haughton**, Samuel.

—— mechanism, by E. J. Marey. **International scientific series, v. 11.**

—— parasites and messmates. *See* **Van Beneden**, P. J.

—— physiology. *See* **Cleland**, John. **Putnam's advanced science series.**

—— products. Chemische Producte aus Thier-Abfällen. *See* **Fleck**, H.

ANIMALS, Domestic. *See* **Domestic animals.**

—— Geography and classification of. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 112.**

—— Habits and instincts of. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 121.**

—— in menageries. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 114.**

—— Landwirthschaftlich nützliche und schädliche Thiere. *See* **Landwirthschaftlich.**

—— Die landwirthschaftliche Thierproduktion. *See* **Weckherlin**, A. von.

—— Manuel du destructeur des animaux nuisibles. *See* **Boitard**, P. **110 Manuels Roret.**

—— Raw material from the animal kingdom. By R. Owen. *See* **Lectures.**

—— The uses of animals in relation to the industry of man. *See* **Lankester**, E.

Annalen der Chemie und Pharmacie. Hrsg. von Friedrich Wöhler und Justus Liebig. B. 57–176. 8°. *Heidelberg*, 1846–54; *Leipzig und Heidelberg*, 1855–72.

—— der deutschen Landwirthschaft in allen ihren Zweigen. Von Dr. Carl Sprengel. One odd vol. 8°. *Braunschweig*, 1836.

—— der Landwirthschaft in den Königlich Preussischen Staaten, von Dr. Alexander von Lengerke. Jahrg. 1–27, 1843–69. 8°. *Berlin*, 1843–69.

—— der Physik. Angefangen von Dr. Fr. Al. Carl Gren; fortgesetzt von L. W. Gilbert. Band 1–76, 1799–1824. 1 v. Sach-Register. 8°. *Halle*, 1799–1824.

—— der Physik und Chemie. *See* **Poggendorff**, J. C.

ANNALES agricoles de Roville. *See* **Dombasle**, C. T. A. Mathieu de.

—— de chimie et de physique. Par de Morveau, Lavoisier, Monge, Berthollet, de Fourcroy, le Baron de Dietrich, Hassenfratz, Adet, Gay-Lussac, Arago, Che-

Digitized by Google

Annales—Continued.

vreul, Savary, Dumas, Pelouze, Boussingault, Regnault, Wurtz et Verdet. Série 1, T. 1-96, 1789-1815. Série 2, T. 1-75, 1816-40. Série 3, T. 1-69, 1841-63. Série 4, T. 1-30, 1864-73. Série 5, T. 1-8, 1874-76. Indices, 6 v. 8°. *Paris.*

——— de la colonisation algérienne. Bulletin mensuel de colonisation française et étrangère, publié sous la direction de M. Hippolyte Peut. v. 1-5. 8°. *Paris*, 1852-54.

——— du Conservatoire impériale des arts et métiers. *See* **Laboulaye**, M. Ch.

——— des Haras et de l'agriculture, publiées par une société d'éleveurs, de professeurs et d'anciens élèves de l'École royal des Haras. 2 v. 8°. *Paris*, 1845.

——— industrielles, publiées par Frédureau & ce., ingénieurs civils. 2 v. with 2 v. of plates, fol. 4°. *Paris*, 1872——.

——— des ponts et chaussées; mémoires et documents relatifs à l'art des constructions, et au service de l'ingénieur; lois, ordonnances, et autres actes concernant l'administration des ponts et chaussées. 58 v. with fol. plates. 8°. *Paris*, 1831-59.

——— de la propriété industrielle, artistique et littéraire. Journal de législation, doctrine et jurisprudence françaises et étrangères, en matière de brevets d'invention, littérature, théâtre, musique, beaux-arts. Rédigé par Pataille et A. Huguet. v. 1-21. 8°. *Paris*, 1853-76——.

——— télégraphiques; publiées par un comité composé de fonctionnaires de l'administration des lignes télégraphiques. T. 4-8. 8°. *Paris*, 1861-65.

ANNALS of chemistry, mathematics, astronomy, natural history, and general science. *See* **Philosophical** magazine.

——— of congress, 1789-1824. *See* UNITED STATES.

——— of the fine arts for 1816. v. 1. 8°. *London*, 1817.

——— of philosophy; a magazine of chemistry, etc. *See* **Thompson**, Thomas.

Annuaire; pour l'an 1831, '32, '36, '38, '41; présenté au roi par le bureau des longitudes. 5 v. 8°. *Paris*, 1831-41.

——— administratif et historique de la Somme, pour les années 1852-53; publié sous les auspices du conseil général du département, par la Société des antiquaires de Picardie. 8°. *Amiens*, 1852.

Annuaire du cosmos; manuel de la science. 2e année. 1e pour 1858. 24°. *Paris*, 1860.

——— du département de la Manche. 2 odd v. 8°. *Saint-Lo*, 1856-59.

——— de l'industrie belge. 24°. *Bruxelles*, 1848.

ANNUAL cyclopædia, American. *See* **American** annual cyclopædia.

——— of Hudson and Menet, for 1870: containing a full list of all newspapers and periodicals published in the United States and Canada: also of leading newspapers in Great Britain, France, Mexico, Central America, South America, China, Japan, etc. 8°. *New York*, 1870.

——— record of science and industry. *See* **Baird**, Spencer F.

ANNUITIES and reversionary payments, Value of. *See* **Jones**, David.

Anquetil. Die Dreh- und Repetirpistolen, oder die sogenannten Revolvers, ihre Vergangenheit, ihre Gegenwart und Zukunft, nebst den allgemeinen Grundsätzen über das Schiessen mit diesen Waffen. Nach dem Französischen von Dr. Christ. Heinrich Schmidt. *Illus.* 16°. *Weimar*, 1855. **222 Neuer Schauplatz der Künste.**

Anschütz, Hermann. Muster-Sammlung für Zimmer- und Dekorationsmaler. Nach der Natur in Herculaneum und Pompeii aufgenommen und für den Zweck dieses Werkes eingerichtet von. Heft. 1, 2. *Illus.* 4°. *München*, 1845.

Ansell, George Frederick. The royal mint, its working, conduct, and operations; with suggestions for its better scientific and official management. *Illus.* sm. 4°. *London*, 1870.

Ansted, David Thomas. The applications of geology to the arts and manufactures. 12°. *London*, 1865.

——— The great stone book of nature. 12°. *Philadelphia*, 1863.

——— Scenery, science and art: extracts from a note book of a geologist and mining engineer. 8°. *London*, 1854.

——— **Tennant,** *Prof.*, and **Mitchell,** Walter. Geology, mineralogy, and crystallography. 8°. *London*, 1855. **Orr's circle of the sciences, v. 5.**

Anstie, Francis Edmund. Notes on epidemics, for the use of the public. 12°. *Philadelphia*, 1866.

Digitized by Google

ANSWERS to questions in natural philosophy, chemistry and astronomy. *See* **Steele**, J. Dorman.

Anthon, Charles. A classical dictionary: intended to elucidate important points connected with the geography, history, biography, mythology, and fine arts of the Greeks and Romans: with account of coins, weights and measures, and tabular values of same. 8°. *New York*, 1840.

——— A system of ancient and mediæval geography. 8°. *New York*, 1850.

Anthony, Edward. A comprehensive and systematic catalogue of photographic apparatus and material: being pt. 2 of Snelling's Dict. of photog. *Illus.* 8°. *New York*, 1854. pp. 56.

——— Same, 1874.

Anthony's photographic bulletin. v. 1–6. 8°. *New York*, 1870–76——.

Anthropological review. 7 v. 8°. *London*, 1863-69.

Note.—To each v. is appended the journal of the Anthropological society of London.

ANTHROPOLOGY. Neurological system of. *See* **Buchanan**, Joseph R.

ANTIDOTES. Manuel des contre-poisons. *See* **Chaussier**, H. **18 Manuels Roret.**

Anti-Newtonian, The. *See* **Loomis,** William Isaacs.

Antiquarian repertory; a miscellany intended to preserve and illustrate several valuable remains of old times. 2d ed. 4 v. in 2. 4°. *London*, 1780.

ANTIQUITATES culinariæ; curious tracts on culinary affairs. *See* **Warner**, Richard.

ANTIQUITIES. Aboriginal monuments of New York, by E. G. Squier. **Smiths'n contrib., v. 2.**

——— Ancient monuments of the Mississippi valley, by E. G. Squier and E. H. Davis. **Smiths'n contrib., v. 1.**

——— Ancient works in Ohio, by C. Whittlesey. **Smiths'n contrib., v. 3.**

——— Archæology of the United States, by S. F. Haven. **Smiths'n contrib., v. 8.**

——— Greek and Roman. *See* **Smith**, William.

——— Hand-books of the Crystal Palace. *See* **Crystal palace library.**

——— Manual of precious stones and antique gems. *See* **Westropp**, Hodder M.

——— Mexican history and antiquities, by B. Mayer. **Smiths'n contrib., v. 9.**

ANTIQUITIES of the provincia Romana. *See* **Pownell**, Governor.

——— Sepulchres of Etruria. *See* **Gray,** *Mrs.* Hamilton.

——— of Wisconsin, by I. A. Lapham. **Smiths'n contrib., v. 7.**

——— Popular observations on. *See* **Brand**, John.

——— Report of the regents of the University of New York, on the historical and antiquarian collection. *See* NEW YORK.

Antisell, Thomas. Before the Commissioner of patents; in the matter of the application of Charles Goodyear, for the extension of letters patent, issued to him June 15, 1844, for an improvement in the manufacture of India rubber fabrics. Report of examiner. 8°. *New York*, 1858. pp. 18.

——— The home cyclopædia of the useful arts, including agriculture, architecture, domestic economy, engineering, machinery, manufactures, mining, photogenic and telegraphic art. 12°. *New York*, 1855.

——— The manufacture of photogenic or hydro-carbon oils from coal and other bituminous substances, capable of supplying burning fluids. 8°. *New York*, 1859.

Anton, Karl Gottlob. Geschichte der Teutschen Landwirthschaft. 3 Bänden. 12°. *Görlitz*, 1799.

Anvers, N. d'. *See* **D'Anvers,** N.

Anville, M. d'. Proposition d'une mesure de la terre, dont il résulte une diminution considérable dans sa circonférence sur les parallèles. 18°. *Paris*, 1735.

ANVILS. De la forge des enclumes, par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sc., arts et métiers, v. 8.; also 15.**

APIARIAN science; Kidder's guide. *See* **Kidder**, K. P.

APIARY, The. *See* **Neighbour**, Alfred.

Apjohn, James. Manual of the metalloids. 16°. *London*, 1864.

APOCALYPSE revealed. *See* **Swedenborg**, E.

Apollodorus, Works of. *See* **Veterum** mathematicorum.

Apollonius Pergæus. Restitution of the treatise on inclinations of. *See* **Burrow**, R.

Digitized by Google

APPARATUS and instruments employed in philosophical and experimental chemistry. *See* **Dictionary of apparatus.**

——— Catalogue of chemical and philosophical. *See* Luhme, J. F., & co.

——— Catalogue of scientific. *See* Luhme, J. F., & co.

——— Manuel du physicien-préparateur *See* **Fan, J., and Chevalier, C.**

APPERT'S process. Observations on the preservation of animal and vegetable substances. *See* **Observations.**

APPLE culturist, The. *See* **Todd,** Sereno Edwards.

APPLES. American pomology. *See* **Warder,** John A.

——— How to cook. *See* **Household** manuals.

Appleton, John L. Bestandtheile der englischen Aussprache. 8°. *New York,* 1869.

Appleton's annual cyclopædia. *See* **American** annual cyclopædia.

——— Cyclopædia of biography: a series of original memoirs of distinguished persons; by Sir Archibald Alison, Wm. Baird, Sir D. Brewster, James Bryce, John Hill Burton, Professors Creasy, Eadie, Ferguson, and Gerdon, James Hedderwick, John a Heraud, Robert Jamieson, Charles Knight, James Manson, James McConnechy, Elihu Rich, Professors Nichol, Spalding and Thompson, and Ralph N. Wornum. American ed. edited by Francis L. Hawks. *Illus.* 8°. *New York,* 1856.

——— Cyclopædia of drawing. *See* **Worthen,** E. E.

——— dictionary of machines, mechanics, engine-work, and engineering. *Illus.* v. 1, 2. 8°. *New York,* 1852. Also ed. 1866 2 *copies.*

——— hand-book of American travel: the northern tour. *See* **Hall,** Edward H.

——— library manual: containing a catalogue raisonné of upwards of twelve thousand of the most important works in every department of knowledge in all modern languages. Part 1. Subjects. Part 2. Biography, classics, miscellanies, and index to part 1. 8°. *New York,* 1847.

——— mechanics' magazine and engineers' journal. Ed. by Julius W. Adams. 3 v. 4°. 8°. *New York,* 1852–54.

Apprentice, The: a weekly journal of art, science, and literature. Ed. by the Artizan club. 4 v. 4°. *London,* 1844–45.

Aptommas. History of the harp; its its origin and progress from the creation to the present time, and accounts of its employment by the antediluvians, Egyptians, Hebrews, Greeks, Romans, Cimbrians, Celts, French, etc.; with a biographical sketch of the most celebrated harpists. 4°. *New York, n. d.*

AQUA FORTIS. Art du distillateur des eaux fortes, par J. F. Demachy. PARIS. **Acad. des sc., arts et métiers, v. 12.37.**

AQUARIA, Hand book of fresh water. *See* **Bishop,** J.

AQUARIUM, The. *See* **Gosse,** Philip Henry.

——— and the sea-side. *See* **Harper,** John.

——— Book of the. *See* **Hibberd,** Shirley.

——— The family. *See* **Butler,** Henry D.

AQUEDUCTS. Abridgments English Patents, No. 36.

——— Construction der Aquäducte von Mauerwerk. *See* **Fontenay,** T.

——— Essay on ancient and modern. *See* **King,** C. Memoir of the Croton aqueduct.

ARABIAN antiquities of Spain. *See* **Murphy,** J. C.

Aradas, Andrea. Elogio accademico del prof. cav. Carlo Gemmellaro letto all'Accademia Gioenia di scienze naturali, di 2 Dicembre 1868. 4°. *Catania,* 1869.

Arago. Report on the atmospheric railway system. **Weale's papers on engineering, v. 3.**

Arago, Dominique François Jean. Astronomie populaire. Œuvre posthume. 4 v. 8°. *Paris et Leipsig,* 1857.

——— Biographies of distinguished scientific men: Bailly, Herschel, Laplace, Fourier, Carnot, Malus, Fresnel, Young, Watt. Trans. by Admiral W. H. Smyth, Rev. Baden Powell, and Robert Grant. Note by W. Fairbairn. 8°. *London,* 1857.

——— Meteorological essays. Introduction by Baron Alexander von Humboldt. Trans. under superintendence of Col. Sabine. 8°. *London,* 1855.

——— Œuvres complètes de. Notices biographiques. 3 v. 1854–1855. Notices scientifiques. 5 v. 1854–1858. Voyages scientifiques. 1 v. 1857. Mémoires scientifiques. 2 v. 1858–1859. Mélanges. 1 v. 1859. 12 v. 8°. *Paris et Leipsig,* 1854–59.

Digitized by Google

Arago, Dominique François Jean. Popular astronomy. Trans. by W. H. Smith and Robert Grant. 2 v. 8°. *London*, 1855–58.

——— Popular lectures on astronomy. Transl., with notes, by Walter K. Kelly. 4th ed. rev. by L. Tomlinson. 12°. *London*, 1854.

ARAUCANIA i sus habitantes. *See* **Domeyko**, Ignacio.

ARAUCANIANS, The. *See* **Smith**, Edmond Reuel.

Arbeiterfreund, Der. Zeitschrift des Centralvereins in Preussen für das Wohl der arbeitenden Klassen. 1 odd v. Jahrg. 1863. 8°. *Berlin*, 1863.

Arbey, Ferdinand. Machines-outils propres à travailler le bois. *See* **Bernier**.

ARBORETUM et fruticetum Britannicum. *See* **Loudon**, J. C.

ARCANA cœlestia; the heavenly arcana. *See* **Swedenborg**.

——— Medical. Die wichtigsten der bis jetzt bekannten Geheimmittel and Specialitäten. *See* **Hahn**, Eduard.

Arcet, Jean Pierre Joseph d'. Dictionnaire des arts et manufactures, de l'agriculture, des mines, etc. *See* **Laboulaye**, C. P. L.

——— Dictionnaire de l'industrie manufacturière, commerciale et agricole. *See* **Baudrimont**, A. E. and others.

——— Note sur la construction et l'emploi des silos dans le nord de la France. 8°. *Paris*, 1841. pp. 16.

ARCH, Theory of the. By Prof. Moseley. *See* **Weale's** Theory of bridges.

ARCHÆOLOGY. The ancient stone implements, weapons and ornaments of Great Britain. *See* **Evans**, John.

——— Antiquity of man. *See* **Lyell**, Charles.

——— Prehistoric man. *See* **Wilson**, Daniel.

——— Prehistoric times. *See* **Lubbock**, John.

Archer, Frederick Scott. The collodion process on glass. 2d ed. 8°. *London*, 1854. pp. 100.

Archer, W., Pritchard's history of infusoria, rev. by. *See* **Pritchard**, Andrew.

Archer, William Henry. Abstracts of English and colonial patent specifications, relating to the preservation of food, etc. 8°. *Melbourne*, 1870.

——— and others. Catalogue of the Victoria exhibition, 1861; with prefatory essays, indicating the progress, resources, and physical characteristics. 8°. *Melbourne.*

ARCHER, The British. *See* **Hastings**, Thomas.

ARCHERY, Book of. *See* **Hansard**, George Agar.

——— Essay on. *See* **Moseley**, Walter Michael.

Archiac, Le Vicomte d'. Histoire des progrès de la géologie de 1834 à 1860. Publiée par la Société géologique de France, sous les auspices du comte de Salvandy, ministre de l'instruction publique. T. 1–9. 8°. *Paris*, 1847–60.

Architects and mechanics' journal: a weekly record of the progress of architecture, building, engineering mechanics, science, the fine arts, etc. v. 1–4. 4°. *New York*, 1859–61.

ARCHITECTURE. American villa. *See* **Anderson**, C. F.

——— Anglican church architecture. *See* **Barr**, J.

——— Arabian antiquities of Spain. *See* **Murphy**, J. C.

——— The architect. *See* **Benjamin**, A.

——— ——— *See* **Ranlett**, W. H.

——— Architect and builder's guide. *See* **Kennion**, John W.

——— Architecten- und Ingenieur-Verein Hannover. *See* HANOVER.

——— Architectura. *See* **Vredeman**, J.

——— Architectural antiquities of Normandy. *See* **Britton**, J., and **Pugin**, A.

——— Architectural dictionary. *See* **Nicholson**, P.

——— Architectural instructor, containing a history of architecture, etc. *See* **Lafever**, M.

——— The architectural magazine. *See* **Loudon**, J. C.

——— Architectural styles. *See* **Rosengarten**, A.

——— L'architecture et la construction pratiques. *See* **Ramée**, Daniel.

——— Architettura di Vitruvio colla traduzione italiana. *See* **Vitruvius**, Pollio. M.

——— L'art de bâtir. *See* **Rondelet**, J.

——— Beauties of modern. *See* **Lafever**, M.

——— British architect. *See* **Swan**, Abraham.

——— The builder. *See* **Builder**.

——— Builder's guide. *See* **Hills**, C.

——— Building chronicle. *See* **Building**.

Digitized by Google

ARCHITECTURE, City, town, and country. *See* **Brooks**, S. H.
—— Civil. *See* **Shaw**, E.
—— Civil engineer and architect's journal. *See* **Civil** engineer.
—— Constructive. *See* **Sloan**, S.
—— Country school-houses; and a treatise on school-house architecture. *See* **Johonnot**, J.
—— Country seats. *See* **Holly**, H. H.
—— Crystal palace; its architectural history. *See* **Berlyn**, P., and **Fowler**, C., *jr.*
—— Dictionary of. *See* **Stuart**, R.
—— Dictionary of terms used in. *See* **Weale**, J.
—— Dictionnaire général des termes d'architecture en français, allemand, anglais et italien. *See* **Ramée**, Daniel.
—— Les dix livres d'architecture. *See* **Vitruvius**, Pollio, M.
—— Elements of practical construction. *See* **Downing**, Samuel.
—— Elemente des Rundbogenstiles. *See* **Möllinger**, K.
—— Encyclopædia of. *See* **Gwilt**, J.
—— Encyclopædia of cottage, farm, and villa. *See* **Loudon**, J. C.
—— Erection of dwelling houses. *See* **Brooks**, S. H.
—— Glossary of terms used in. *See* **Glossary**.
—— Gravel wall and octagon mode of building. *See* **Fowler**, O. S.
—— Grotesque. *See* **Wright**, William.
—— Handbook of. *See* **Fergusson**, J.
—— History of. *See* **Fergusson**, James.
—— History of. *See* **Freeman**, Edward A.
—— History of. *See* **Tuthill**, *Mrs* L. C.
—— Homes for the people. *See* **Wheeler**, G.
—— Homestead. *See* **Sloan**, S.
—— Illustrated glossary of practical. *See* **Brees**, S. C.
—— Iron. *See* **Iron**.
—— Jahrbuch über die Leistungen und Fortschritte auf dem Gebiete der practischen Baugewerbe. *See* **Jahrbuch**.
—— Landscape gardening and landscape architecture. *See* **Repton, H.**
—— Landscape gardening and rural art. *See* **Woodward**, Geo. E. and F. W.
—— Lehrbuch zur Anfertigung der Bauanschläge, etc. *See* **Wölfer**, M.
—— Literatur des Bau- und Ingenieurwesens, etc. *See* **Gerold** & co.

ARCHITECTURE. Die Literatur des Bauwesens. *See* **Malberg**, A.
—— Manuel d'architecture. *See* **Toussaint. 30 Manuels Roret.**
—— Mechanical principles of. *See* **Moseley**, H.
—— Model architect. *See* **Sloan**, Samuel.
—— Musterzeichnungen von Bauplänen. *See* HESSE-DARMSTADT.
—— National architect. *See* **Woodward**, George E., and **Thompson**, E. G.
—— Naval. Transactions of the Institute of naval architects. *See* LONDON.
—— Naval. Trattato del nuovo timone de prora *See* **Ghersi**, G. D.
—— New York crystal palace; description of the building. *See* **Carstensen**, G., and **Gildemeister**, C.
—— of birds, The. 12°. *Boston*, 1831. **Library of entertaining knowledge.**
—— of country houses. *See* **Downing**, A. J.
—— Orders of. *See* **Leeds**, W. H.
—— Plans, elevations, and sections of buildings. *See* **Laing**, G.
—— Principles of design in. *See* **Garbett**, E. L.
—— Principles of gothic ecclesiastical. *See* **Bloxam**, M. H.
—— Public buildings of London. *See* **Pugin**, A., and **Britton**, J.
—— Quarterly papers on. *See* **Weale**, John.
—— Remarks on rural. *See* **Downing**, A. J. **Landscape** gardening.
—— Rudimentary. *See* **Bury**, T. T.
—— Rural. *See* **Upjohn** Richard.
—— rural, Essays on. *See* **Dowing**, A. J.
—— Rural. Handbuch des landwirthschaftlichen Bauwesens. *See* **Engel**, F.
—— Rural. Manuel des constructions rustiques. **72 Manuels Roret.** *See* **Fontenay, de.**
—— rurale et communale. *See* **Duval**, C., and others.
—— School. *See* **Barnard**, H.
—— Specifications for practical. *See* **Bartholomew**, A.
—— Street *See* **Delassaux**, Victor, and **Elliott**, John.
—— Verzierungen für Arch. *See* **Steinhäuser.**
—— Wonders of. **Illustrated library of wonders, v. 6.**
—— Zinkguss-Ornamente. *See* **Geiss**, Moritz.

Digitized by Google

Archiv für Mineralogie, Geognosie, Bergbau, und Hüttenkunde; hrsg. von C. J. B. Karsten. B. 1–26. 8°. *Berlin*, 1829–54. B. 26 contains index of the series.

Archives des découvertes et des inventions nouvelles, faites dans les sciences, les arts et les manufactures, tant en France que dans les pays étrangers pendant l'année 1808–1839; avec l'indication succincte des principaux produits de l'industrie nationale française; la liste des brevets d'invention, de perfectionnemens et d'importation, délivrés par le gouvernement pendant la même année, etc. 31 v. 8°. *Paris*, 1809–41.

ARCTIC boat journey. *See* **Hayes**, Isaac I.

—— discoveries. *See* **Davis**, J. E. **Science lectures for the people, series 7.**

—— explorations. *See* **Kane**, Elisha Kent.

—— ocean. Astronomical observations in the arctic seas. 1853–1855. By E. K. Kane. **Smiths'n contrib., v. 12.**

—— —— Magnetical observations in the arctic seas, by E. K. Kane. **Smiths'n contrib., v. 10.**

—— —— Meteorological observations in the arctic seas, by E. K. Kane. **Smiths'n contrib., v. 11.**

—— —— Voyage of the "Fox" in the arctic seas. *See* **McClintock**, F. L.

Ardenni, —, and **Julia de Fontenelle**, —. Manuel du poêlier-fumiste, ou traité complet de cet art. 2e éd. 18°. *Paris*, 1835. **66 Manuels Roret.**

ARÉOMÈTRE; un nouveau mode de graduation de l'. *See* **Pouillet. Mémoire** sur la densité de l'alcool.

Aresti, Joseph. Lithozographia, or aquatinta stippled gradations produced upon drawings washed or painted on stone; to which is added a description of the principal methods employed to obtain lavis, or washed effects on stone. Chiefly translated and compiled from the works of eminent continental lithographers. *Illus.* 8°. *London*, 1856. pp. 16.

Argyll, *Duke of*. Primeval man; an examination of some recent speculations. 24°. *New York*, 1869.

ARITHMETIC. *See* **Davies**, Charles.

—— American commercial. *See* **Bryce**, F. A.

—— American philosophical. *See* **Stoddard**, John F.

ARITHMETIC. Arithmetical books. *See* **De Morgan**, Augustus.

—— Arithmetical investigator. *See* **Bedford**, John W.

—— Bourdon's. Transl. by Charles S. Venable. *See* **Bourdon**, Pierre Louis Marie.

—— Complete system of. *See* **Carey**, George G.

—— The Crittenden commercial. *See* **Groesbeck**, John.

—— Dual; a new art. *See* **Byrne**, Oliver.

—— Equational. *See* **Hipsley**, W.

—— First lessons in. *See* **Davies**, Charles.

—— Grammar of. *See* **Davies**, Charles.

—— Instrumental. *See* **Jillson**, Arnold.

—— Key to the treatise on. *See* **Young**, J. R.

—— Lectures on the philosophy of. *See* **Parke**, Uriah.

—— Manuel d'arithmétique. *See* **Collin. 15 Manuels Roret.**

—— Practical. *See* **Walton**, Geo. A., and Electa, N. L.

—— Praktisches Rechenbuch für ded'sche Elementarschulen. *See* **Walz**, G. L.

—— Progressive and practical. *See* **Robinson**, Horatio N.

—— Ray's. 3d pt. *See* **Ray**, Joseph.

—— Sammlung von Rechnungs-Beispielen über die wichtigsten Lehrsätze der Landwirthschaft. *See* **Kik**, W.

—— School. *See* **Davies**, Charles.

—— Schriftliches Rechnen. *See* **Deghnée**, Jos.

—— Treatise on. *See* **Loomis**, Elias.

—— Treatise on. *See* **Young**, J. R.

—— Universal. (Algebra.) *See* **Newton**, *Sir* Isaac.

—— Universal calculator. *See* **Crowgey**, Robert.

ARKANSAS. Industrial university, Catalogue of, with a normal department therein, for 1872–1873. 8°. *Little Rock*, 1874.

Arlès-Dufour, Jean Barthélemy. Album de l'exposition universelle. *See* **Brisse**, L.

Arlidge, J. T. Pritchard's history of infusoria, enlarg. and rev. *See* **Pritchard**, Andrew.

ARMAMENTS, European, 1867. *See* **Brackenburg**, C. B.

Armellino, G. Die Kunst des Clavierstimmens. Nach dem "Accordeur" des G. Armellino, mit Benutzung vieler an-

Digitized by Google

Armellino, G.—Continued.
dern Quellen, frei bearbeitet. Mit 25 Figuren und 9 Notenbeispielen. 8°. *Weimar*, 1857. **21 Neuer Schauplatz der Künste.**

Armengaud, —. Engineer and machinist's drawing book. *See* **Le Blanc.**

Armengaud, —, *aîné*. Publication industrielle des machines, outils et appareils les plus perfectionnés et les plus récents. 3e éd. 23 v. texte, 8°. 23 v. planches, 4°. *Paris*, 1848-76——.

——— Traité théorique et pratique des moteurs hydrauliques. Nouvelle édition entièrement refondue et accompagnée d'un atlas de 20 planches in-folio, avec un grand nombre de figures sur bois insérés dans le texte. 2 v. 4°. *Paris*, 1858.

Armengaud, Charles. Practical draughtsman. *See* **Armengaud,** J. E.

——— and **Mathieu,** J. Instructions pratiques à l'usage des inventions; formalités à accomplir en tous pays pour obtenir la concession de patentes ou brevets d'invention. 8°. *Paris*, 1859.

Armengaud, Jules Édouard and Charles, and **Amoureux,** Jules. The practical draughtsman's book of industrial design, and machinist and engineer's drawing companion. *Illus.* Transl. from the French by William Johnson. 4° *Philadelphia*, 1863.

ARMOR, Treatise on. *See* **Holly,** A. L.

ARMORED vessels, Report on. *See* UNITED STATES. **Navy** department.

Armour, James. Iron and heat; beams, pillars, and iron sm lting; exhibiting in simple form the principles concerned in the construction of iron beams, pillars, and bridge girders, and the action of heat in the smelting furnace. 16°. *London*, 1871.

——— Power in motion: horse power, wheel gearing, driving bands, and angular forces. 12°. *London*, 1871.

ARMS and armor. *See* **Boutell,** Charles.

Armstrong, Henry E. Food. **Science lectures for the people, series 7.**

Armstrong, R. Chimneys for furnaces, fireplaces, and steam boilers. 18°. *New York*, 1873. **Van Nostrand's science series, No. 1.**

Armstrong, Robert. Dimensions of the locomotive engine boiler. *See* **Tredgold,** T. **Steam engine, v. 1,** 1st series.

——— An essay on the boilers of steam engines: their calculation, construction, and management, with a view to the saving of fuel; including observations on railway and other locomotive engines, steam navigation, smoke burning, incrustations, explosions, etc. New ed. 8°. *London*, 1839.

——— The modern practice of boiler engineering; containing observations on the construction of steam boilers, furnaces used for smoke prevention, with a chapter on explosions; revised, with notes and an introduction, by John Bourne. 16°. *London*, 1856.

——— A rudimentary treatise on steam boilers; their construction and practical management. 12°. *London*, 1850. **Weale's series, No. 59.**

Armstrong, *Sir* William. The Armstrong gun compared with Britten's rifled guns. *See* **Britten,** B.

——— Armstrong breech loading guns. *See* **Scoffern,** J.

——— Canons rayés, systèmes Cavalli et Armstrong. *See* **Adts,** N.

——— Canons rayés, systèmes Armstrong et Whitworth. *See* **Buchwalder,** É.

ARMY. Dictionary of the officers in the army of the U. S. *See* **Gardner,** C. K.

——— life on the border, Thirty years of. *See* **Marcy,** R. B.

Arnold, Thomas Kerchever. First Greek book; revised by J. A. Spencer. 12°. *New York*, 1850.

Arnollet. System of atmospheric railways. **Weale's papers on engineering, v. 5.**

Arnott, Neil. Elements of physics, or natural philosophy. 6th completed ed. Pt. 1. 8°. *London*, 1864. Another, Amer. ed., *New York*, 1877.

——— Smokeless fireplace, chimney-valves, and other means, old and new, of obtaining healthful warmth and ventilation. 8°. *London*, 1855.

——— Warming and ventilating; with directions for making and using the thermometer stove, or self-regulating fire. 8°. *London*, 1838.

Arnoult, E. Pronouncing reading book of the French language, particularly cal-

Digitized by Google

Arnoult, E.—Continued.
culated to render the speaking of French easy to the American student. Part 1st. 8°. *Boston*, 1857.

Arnoux, J. J. Le travail universel; revue complète des œuvres de l'art et de l'industrie exposées à Paris en 1855. T. 1, 2. 8°. *Paris*, 1856.

Arrowsmith, James. The paper hanger's and upholsterer's guide; a treatise on paper hanging and upholstering, to which is added a tabular view, with diagrams showing the proportion for cutting 130 various sized festoons. 16°. *London*, 1851. pp. 70. 2 copies.

Arsenne, L. C. Manuel du peintre et du sculpteur; avec une notice sur les manuscrits à miniatures de l'Orient et du moyen-âge; et sur les voyages à figures, dans leurs rapports avec la peinture moderne, par Ferdinand Denis. T. 1-2. 18°. *Paris*, 1833. **21 Manuels Roret.**

ART. Album mittelalterlicher Kunst. *See* **Kallenbach,** G. G.

——— The American artist's manual. *See* **Cutbush,** James.

——— Annals of. *See* **Annals** of the fine arts.

——— Annual of scientific discovery. *See* **Wells,** D. A.

——— applied to industry. *See* **Burges,** William.

——— Arcana of. *See* **Timbs,** J.

——— Beiträge zur Förderung der Kunst in den Gewerken. *See* HANOVER.

——— Die Berliner Kunst-Ausstellung von 1852. *See* **Schasler,** M.

——— The British encyclopædia, or dictionary of arts and sciences. *See* **Nicholson,** William.

——— criticism, Elements of. *See* **Samson,** G. W.

——— Dictionary of. *See* **Brande,** W. T.

——— ——— *See* **Brande** W. T., and **Cox,** George W.

——— ——— terms in. *See* **Fairholt,** F. W.

——— ——— terms used in. *See* **Weale,** J.

——— Dictionnaire des arts. *See* **Bouillet,** M. N.

——— ——— *See* **Courtin,** E. M.

——— Elementary history of. *See* **D'Anvers,** N.

——— Elements of; a poem. See **Shee,** Martin Archer.

——— Essai sur l'art industriel. *See* **Laboulaye,** Ch.

ART, Essays on. *See* **Palgrave,** Francis Turner.

——— Fine arts in Great Britain and Ireland. *See* **Taylor,** W. B. Sparsfield.

——— The history of ancient. *See* **Winkelmann,** John.

——— Introduction to the study of. *See* **Dwight,** M. A.

——— journal; old series to 1849, called "The art union: monthly journal of the fine arts, and the arts decorative and ornamental." 30 v., 1847-76. 4°. *London*, 1847-76——.

——— manual of monumental brasses. *See* **Haines,** Herbert.

——— of book binding; its rise and progress; including account of the New York bookbindery. 8°. *New York*, 1850. pp. 49.

——— of confectionery; various methods of preserving fruits and fruit juices, the preparation of jams and jellies, fruit and other syrups, summer beverages, etc. 12°. *Boston*, 1866.

——— of landscape painting in oil colors. 18°. *New York*, 1853.

——— of living, Plain thoughts on. *See* **Gladden,** Washington.

——— of making masts, yards, gaffs, booms, blocks, and oars. *Illus.* 8°. *London*, 1797.

——— of rigging; with copious tables. *Illus.* New ed., rev. by George Biddlecombe. 8°. *London* 1848.

——— de l'ornemaniste, du stucateur, du carreleur, en pavés de mosaïque, et du décorateur en divers genres; par M***. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 1.**

——— Pictorial and industrial; an illustrated magazine. 3 v. fol. *London*, 1870-72.

——— recreations. *See* **Urbino,** L. B., and others.

——— Report on the department of practical. *See* GREAT BRITAIN.

——— student. v. 1. roy. 8°. *London*, 1864.

——— Year book of facts in. *See* **Timbs,** J.

ARTERIES, Outlines of. *See* **Neill,** John.

ARTESIAN wells. *See* **Spetzler,** J. A.

——— ——— Anlage artesischer Brunnen. *See* **Hartmann,** C. A. **124 Neuer Schauplatz der Künste.**

Arthur, Robert. Anatomy of the dental system. *See* **Blandin,** Ph. Fr. **American library dental science, v. 7.**

——— Treatise on the use of adhesive gold foil. 8°. *Philadelphia*, 1857.

Digitized by Google

Arthur, William. An etymological dictionary of family and christian names; with an essay on their derivation and import. 12°. *New York*, 1857.

Artigues, d'. Mémoire sur la conservation des blés. 8°. *Paris*, 1820. pp. 14.

ARTILLERIST. Dictionnaire de l'artilleur. *See* **Belidor,** B. F. de.

ARTILLERY. Aide-mémoire à l'usage des officiers d'artillerie. *See* FRANCK.

—— Artillerie-Lehre. *See* **Rutzky,** Andreas.

—— Artillerist's companion. *See* **Tousard,** L. de.

—— Artillerist's manual. *See* **Gibbon,** J

—— Construction of. *See* **Mallet,** R.

—— for the U. S. land service. *See* **Mordecai,** A.

—— New field artillery of Europe, etc. *See* **Craig,** B. F.

—— Progrès récents de l'artillerie. *See* **Leroy d'Étiolles,** J. J. J.

—— Traité d'artillerie. *See* **Piobert,** G.

—— Transformation du matériel de l'artillerie. *See* **Duheut,** L.

—— The volley gun. *See* **Vandenburgh,** A.

—— Zeichnen und Aufnehmen des Artillerie-Materials. *See* **Burg,** M.

—— Zeichnungen der preussischen Feld-Artillerie. *See* **Kameke,** H. F.

ARTISAN, American. *See* **American.**

—— Hand book for the. *See* **Byrne,** O.

—— or mechanic's instructor. *See* **Carey,** Geo. G.

ARTISTS, Book of. *See* **Tuckerman,** Henry T.

—— instruments, etc. **Abridgments English Patents, No. 54.**

—— Livre nouveau et utile pour toutes sortes d'artistes. *See* **De la Feuille,** Daniel.

—— of antiquity. *See* **Sillig,** Julius.

Artizan: monthly journal of the operative arts, edited by the Artizan club. New series. v. 2–29. *London*, 1844–71.

ARTIZAN'S guide. *See* **Moore,** R.

ARTS, Advancement of. *See* **Bailey,** A. M.

—— and manufactures in India. By J. F. Royle. *See* **Lectures.**

—— and sciences, Register of. *See* **Register.**

—— Annales de l'industrie; mémoire sur les arts. *See* **Le Normand,** L. S. and **Moléon,** J. G. v. de.

ARTS. Applications de la science à l'industrie et aux arts. *See* **Figuier,** G. L.

—— Bibliotheca mechanico-technologica. *See* **Engelmann,** W.

—— Bibliothèque physico-économique. *See* **Bibliothèque.**

—— Boston journal of. *See* **Webster,** J. W.

—— Bulletin de la Société d'encouragement pour l'industrie nationale. *See* PARIS.

—— Cyclopædia of. *See* **Partington,** T. F.

—— Cyclopædia of the useful. *See* **Antisell,** T.

—— Cyclopædia of useful. *See* **Tomlinson,** C.

—— Descriptions des arts. *See* PARIS. **Acad. roy. des sc., arts et métiers.**

—— Dictionary of the. *See* **Francis,** G. W.

—— Dictionary of mechanical science, etc. *See* **Jamieson,** A.

—— Dictionnaire des, etc. *See* **Laboulaye,** C. L.

—— Elegant, for ladies. *See* **Elegant arts.**

—— Encyclopédie méthodique. Arts et métiers mécaniques. *See* **Encyclopédie.**

—— Handmaid to. *See* **Handmaid.**

—— Illustrations of. *See* **Aiken,** A.

—— Illustration of ancient South American. *See* **Ewbank,** T. Life in Brazil.

—— Journal of the. *See* **Building** chronicle.

—— Journal of science and the arts. *See* LONDON.

—— Journal of the Society of. *See* LONDON. **Society** of arts.

—— Laboratory, or, school of. *See* **Smith,** G.

—— Literatur der Gewerbskunde. *See* **Krieger,** J. C.

—— Magazine of the useful. *See* **Magazine.**

—— Manual of. *See* **Manual.**

—— manufactures and mines, Dictionary of. *See* **Ure,** Andrew.

—— manufactures, etc., of the Greeks and Romans. *See* **Fosbroke,** T. D. **Lardner's cabinet cyclopædia, v. 45, 46.**

—— De l'origine des arts chez les anciens. *See* **Goguet,** A. Y.

—— Schedula diversarum artium. *See* **Theophilus,** Essai sur divers arts; also, **L'Escalopier,** Chas. de.

Digitized by Google

ARTS, sciences and manufactures, The new school of. *See* **School** of arts.

——— Traité de mécanique appliquée aux arts. *See* **Borgnis**, J. A.

——— Useful. *See* **Pictorial** gallery of arts.

——— Waste products and undeveloped substances. *See* **Simmonds**, P. L.

Artus, Wilibald. Vierteljah esschrift für technische Chemie, landwirthschaftliche Gewerbe, Fabrikwesen und Gewerbtreibende überhaupt. Unter Mitwirkung mehrerer Gelehrten, Fabrikanten und Techniker. *Illus.* Jh g. 1–5, 1859–63. 8°. *Quedlinburg.*

Aschauer, Joseph von. Konstruktions-Lehre. 8°. *Graz*, 1842.

Ash, John. The new and complete dictionary of the English language. 2 v. 8°. *London*, 1775.

Ashburner, John. Notes and studies in the philosophy of animal magnetism and spiritualism. 8°. *London*, 1867.

Ashcroft, John. Railway directory for 1869. 8°. *New York*, 1869.

ASHES. Aschen-Analysen. *See* **Wolff**, Emil.

——— Die mittlere Zusammensetzung der Asche. *See* **Wolff**, *Dr.* Emil.

Ashhurst, John, *jr.* Injuries of the spine, with an analysis of nearly four hundred cases. 8°. *Philadelphia*, 1867.

ASIA, Across America and. *See* **Pumpelly**, Raphael.

——— Minor, Travels in. *See* **Van Lennep**, Henry J.

ASPHALTUM. Ueber den Asphalt. *See* **Huguenet**, I.

ASSAYING. Assayer and miner's assistant. *See* **Schmidt**, Peter von.

——— The assayer's guide. *See* **Lieber**, O. M.

——— Manual of practical. *See* **Mitchell**, J.

——— metals. *See* **Cramer**, John Andrew.

——— Metallurgische Probirkunst. *See* **Kerl**, Bruno.

——— Die Probirkunst. *See* **Hartmann**, C. F. A.

——— Die Probirkunst mit dem Löthrohre. *See* **Plattner**, Carl Friedrich.

——— Th. Bodemann's Anleitung zur Probirkunst. *See* **Kerl**, Bruno.

Assmuss, Eduard. Die Fabrikation der Zucker-Couleur, Rum-, Essig- und Bier-Couleur. Ein Handbuch für Couleur-, Liqueur-, ätherische Oele- und Essig-Fabrikanten. 18°. *Berlin*, 1866.

Assmuss, Eduard. Die trockene Destillation des Holzes, und Verarbeitung der durch dieselbe erhaltenen Rohproducte auf feinere, wie auf Essigsäure, essigsaure Salze, Terpentinöl, Wagenschmiere, Kienruss, etc. 8°. *Berlin*, 1867.

Astle, Thomas. The origin and progress of writing, as well hieroglyphic as elementary; also of printing. 2d ed. 4°. *London*, 1803.

Astley, Philip. System of equestrian education, exhibiting the beauties and defects of the horse, etc. 8°. *London*, 1801.

ASTOR library. *See* NEW YORK (city).

ASTRO-theology. *See* **Derham**, W.

ASTRONOMICAL instruments. Astronomische Instrumentenkunde. *See* **Carl**, P.

——— Description et usage des principaux instruments d'astronomie. Par P. C. Le Monnier. PARIS. **Acad. des sc, arts et métiers, v. 42.**

——— Méthode pour diviser les instruments d'astronomie. Par M. F. d'A. de Chaulnes. PARIS. **Acad. des sc., arts et métiers, v. 42, 18.**

ASTRONOMY and general physics. *See* **Whewell**, William.

——— and geography, A tutor to. *See* **Moxon**, Joseph.

——— Annals of the astronomical observatory. *See* **Georgetown**, D. C.

——— Appareils optiques pour l'astronomie. *See* **Porro**, Ignazio.

——— Astronomical and geographical essays. *See* **Adams**, George.

——— Astronomical and meteorological observations during 1869. *See* **Sands**, Commodore B. F.

——— Astronomical observations in the Arctic seas 1853–55. By E. K. Kane. **Smithsn contrib., v. 12.**

——— Astronomie populaire. *See* **Arago**, François.

——— Das astronomische Diagramm. *See* **Prestel**, M. A. F.

——— By G. B. Airy. *See* **Herschel**, *Sir* J. F. W. **Manual** of scientific enquiry.

——— Celestial objects. *See* **Webb**, T. W.

——— Celestial planispheres. *See* **Oxley**, Thomas.

——— Descriptive. *See* **Chambers**, George F.

——— Elementary treatise on. *See* **Gummere**, John.

——— Elements of. *See* **Ryan**, James.

Digitized by Google

ASTRONOMY, Elements of. *See* **White**, Charles J.

——— Handbook of natural philosophy and. *See* **Lardner**, D.

——— Histoire de l'astronomie ancienne. *See* **Delambre**, M.

——— History of. By R. W. Rothman. LONDON. **Society of useful knowledge, v. 3.**

——— Lectures on. *See* **Moseley**, H.

——— Manual of. *See* **Chauvenet**, W.

——— Manuel d'astronomie *See* **Bailly**, C. F. **10 Manuels Roret.**

——— Mechanical philosophy, horology, and. *See* **Carpenter**, W. B.

——— Mesure de la terre. *See* **Anville**, M. d'.

——— Navigation and nautical astronomy. *See* **Jeans**, H. W.

——— Nautical, Treatise on. *See* **Young**, J. R.

——— Observational. *See* **Slugg**, J. T.

——— Outlines of. *See* **Herschel**, *Sir* J. F. W.

——— Photometrische Messungen an Fixsternen. *See* **Seidel**, L.

——— Popular lectures on. *See* **Arago**, François.

——— Practical. *See* **Loomis**, Elias.

——— Practical. By H. Breen. *See* **Young**, J. R.

——— Recent progress of. *See* **Loomis**, Elias.

——— Spherical. *See* **Bartlett**, W. H. C.

——— A system of. *See* **Adams**, John.

——— Teneriffe: an astronomer's experiment. *See* **Smyth**, C. P.

——— Theoretical. *See* **Watson**, James C.

——— Traité d'astronomie. *See* **Francœur**, L. F.

——— A treatise on. *See* **Herschel**, *Sir* J. F. W.

——— A treatise on. *See* **Norton**, Wm. A.

——— A treatise on. *See* **Robinson**, H. N.

——— Treatise on. By B. H. Malkin. LONDON. **Society of useful knowledge, v. 3.**

——— Works of Ferguson. *See* **Ferguson**, J.

ATCHAFALAYA light-house, Louisiana. Specifications of. *See* UNITED STATES. **Treasury** department.

Atchley's civil engineer and contractor's estimate and price book. *See* **Haskoll**, W. Davis.

Athenæus. The deipnosophists, or banquet of the learned; literally translated by C. D. Young. 3 v. 12°. *London*, 1854.

Athenæus, Works of. *See* **Veterum** mathematicorum.

ATHENS. Public economy of the Athenians. *See* **Boeckh**, Augustus.

ATHLETIC sports for boys. 12°. *New York*, 1866.

Atkinson, E. Treatise on physics; transl. and ed. by. *See* **Ganot**, A.

Atlantic monthly, The. A magazine of literature, art, and politics. v. 1-32. 8°. *Boston*, 1857-73.

ATLANTIC ocean. Cruise of the Dolphin. *See* **Lee**, S. P.

ATLAS des Bauwesens. *See* **Fränkel**, Wilhelm, and **Heyn**, Rudolf.

——— des Bergwesens. *See* **Schwamkrug**, Reinhold and **Bischoff**, Ferdinand.

——— der mechanischen Technik. *See* **Hartig** and **Weiss.**

——— Mitchell's new general atlas, 1866. *See* **Mitchell**, S. Augustus.

——— von Deutschland, den Niederlanden, Belgien, und der Schweiz. *See* **Stieler**, Adolf.

Atlee, W. F. Military surgery. *See* **Sargent**, F. W.

ATMOSPHERE. Atmospheric electricity. *See* **Murray**, John.

——— Atmospheric waves, by W. R. Birt. *See* **Herschel**, *Sir* J. F. W. **Manual** of scientific enquiry.

——— Les courants atmosphériques. *See* **Meller**, P.

——— Effects of a storm on the day following the occurrence. *See* **Johnson**, W. R.

——— Experiments and adventures in the. *See* **Turnor**, Hutton.

——— The natural history of. *See* **Robertson**, Henry.

——— Pression atmosphérique, et application de la ventouse. *See* **Gondret**, Louis François.

ATOMIC theory, An introduction to the. *See* **Daubeny**, C.

Atwood, D. T. Rules of proportion. v. 1. 12°. *New York*, 1867.

Aubergier. Oenologie oder theoretisch-praktische Lehre von der Kultur, der Erzeugung, Kelterung, Gährung, Behandlung, Veredlung und Aufbewahrung der Weine. *Illus.* Nach dem Französischen von Joseph Servière. 8°. *Ilmenau*, 1827. **29 Neuer Schauplatz der Künste.**

Digitized by Google

Aubuisson de Voisins, J. F. d'. A treatise on hydraulics. Translated from the French and adapted to the English units of measure, by Joseph Bennett. 8°. *Boston*, 1852.

Aucellin, C. Der practische Flachs-, Hanf- und Wergspinner auf Maschinen, nebst den wichtigsten Notizen über den Flachs- und Hanfbau, über die neue verbesserte Flachsröste und über die vervollkommneten Vorbereitungsmaschinen dieser Gespinnststoffe. Aus dem Französischen übersetzt und mit Zusätsen vermehrt von Dr. C. H. Schmidt. *Illus.* 8°. *Weimar*, 1857. **236 Neuer Schauplatz der Künste.**

Auch, Jacob. Handbuch für Landuhrmacher. Nebst einer vollständigen Beschreibung der Abbildung hierzu. *Illus.* 8°. *Ilmenau*, 1827. **30 Neuer Schauplatz der Künste.**

Audsley, W. and G. Guide to the art of illuminating and missal painting. 6th ed. 18°. *London*, 1861.

Audubon, the naturalist of the new world: his adventures and discoveries. *See* **St. John,** *Mrs.* Horace.

Auer, Alois. Die Entdeckung des Naturselbstdruckes. 8°. *Wien*, 1853. pp. 16. Another ed. 4°. *Wien*, 1853. pp. 75.

Note.—In German, English, Italian, and French, in parallel columns, with plates.

AUGSBURG. Bericht des naturhistorischen Vereins. 8°. *Augsburg*, 1865.

Agustin, *Fray* Miguel. Libro de los secretos de agricultura, casa de campo y pastoril. sm. 4°. *Barcelona*, 1722.

AURORA borealis. Auroral phenomena in the higher northern latitudes, by P. Force. **Smiths'n contrib., v. 8.**

——— ——— On the recent secular period of the, by D. Olmstead. **Smiths'n contrib., v. 8.**

——— ——— Traité physique et historique de l'aurore boréale. *See* **Mairon,** M. de.

AU SABLE, The chasm of the. *See* **Averille,** H. K., *jr.*

Austin, *Miss.* The home book. *See* **Valentine,** R.

Austin, H. Builder's guide; rev., etc., by. *See* **Hills,** C.

Austin, James G. A practical treatise on the preparation, combination, and application of calcareous and hydraulic limes and cements. 12°. *London*, 1862.

AUSTRALIA. Gold deposits in. *See* **Davison,** S.

——— Journal of a voyage to. *See* **Scoresby,** W.

——— Melbourne public library. Catalogue for 1861. *See* MELBOURNE.

——— Victorian exhibition, 1861, Catalogue of. *See* **Archer,** W. H.

AUSTRIA. Ausweise über den auswärtigen Handel Österreichs im Sonnen-Jahre 1859–64. 5 v. fol. Wien, 1861–65. 7 v. 4°. *Wien*, 1867–73.

Note.—Jahr 1867, title changed to Österreichisch-Ungarische Monarchie.

——— Bericht über die österreichische Literatur der Zoologie, u. s. w. *See* VIENNA.

——— Handels- und Gewerbekammer für das Erzherzogthum Oesterreich ob der Enns. Jahres-Bericht 1852–62. 8°. *Linz*, 1853–62.

——— Handels- und Gewerbekammer für Österreich unter der Enns. Die Benützung der Berge-Wässer und fliessenden Wässer in Nieder-Oesterreich für die Landwirthschaft und Industrie. 1. Band. 8°. *Wien*, 1857.

——— ——— Statistische Uebersicht der wichtigsten Productionszweige. 8°. *Wien*, 1855.

——— Kaiserliche Akademie der Wissenschaften. Sitzungsberichte. Mathematisch-naturwissenschaftliche Classe. B. 60–70, Jahrg. 1869–74. 8°. *Wien*, 1870–74.

——— K. K. allgemeine Hofkammer. Beschreibung der Erfindungen und Verbesserungen, für welche in den kaiserlich-königlichen österreichischen Staaten Patente ertheilt wurden, und deren Privilegiums-Dauer nun erloschen ist. Jahre 1821–47. 4°. *Wien*, 1841–47.

——— K. K. Direction der admin. Statistik. Statistisches Handbüchlein für die Oesterreichische Monarchie. 18°. *Wien*, 1861.

——— K. K. geographische Gesellschaft. Mittheilungen. 12 v. Jahrg. 1857–73. 8°. *Wien*, 1857–74.

——— K. K. Handels-Ministerium. Die Fabriksgesetze Englands seit 1833. 8°. *Wien*, 1869.

——— ——— Gutachten der Handels- und Gewerbekammern über die Regelung der Arbeitszeit in Fabriken. 4°. *Wien*, 1869.

——— ——— Zur Statistik der Arbeiter-Verhältnisse. **1. Heft.** 8°. *Wien*, 1869.

Digitized by Google

AUSTRIA. K. K. landwirthschaft. Gesellschaft. Amtlicher Bericht über die im Mai 1857 abgehaltene fünfzigjährige Jubelfeier. roy. 8°. *Wien*, 1858.

——— K. K. Ministerium für Handel, Gewerbe und öffentliche Bauten. Bericht der Handels- und Gewerbekammer für das Erzherzogthum Oesterreich unter der Enns. Jahre 1853–60. 8°. *Wien*, 1854–61.

——— K. K. Ministerium des Innern. Abbildungen österreichischer Rindvieh-Racen. fol. *Wien*, 1859.

——— K. K. Ober-Realschule am Schottenfelde in Wien. Jahres-Bericht, 1860. 4°. *Wien*, 1861.

——— K. K. Österreichisches Central-Comité. Bericht über die Welt-Ausstellung zu Paris im Jahre 1867. 8°. *Wien*, 1869.

——— K. K. patriotisch-ökonomische Gesellschaft im Königreiche Böhmen. Wochenblatt der Land-, Forst- und Hauswirthschaft für den Bürger und Landmann. Jahrg. 4–13, 1853-62. 4°. *Prag*, 1853–62.

——— K. K. statistische Central-Commission. Die Bevölkerung von Wien und seiner Umgebung nach dem Berufe und der Beschäftigung. 1. Theil. 8°. *Wien*, 1874.

——— ——— Die Eisenbahnen der Österreichisch-Ungarischen Monarchie, und ihr Betrieb. 1863–69. 4°. *Wien*, 1870–72.

——— ——— Mittheilungen aus dem Gebiete der Statistik. Jahrg. 1868–73. 8°. *Wien*, 1868–74.

——— ——— Programm zur Verfassung einer internationalen Statistik der Unterrichts-Anstalten. 4°. *Wien*, 1872. 2 copies.

——— ——— Programme d'organisation d'une statistique internationale des établissements d'enseignement. 4°. *Vienne*, 1872.

——— ——— Statistisches Handbüchlein des Kaiserthumes Österreich, für das Jahr 1865–66. 2 nos. 16°. *Wien*, 1867–68.

——— ——— Statistisches Jahrbuch der Österreichischen Monarchie, für die Jahre 1863–1871. *Wien*, 1865——.

——— ——— Tafeln zur Statistik der Österreichischen Monarchie. 7 v. Die Jahre 1860–65. 4°. *Wien*, 1868–71.

——— Nachträge zu Maly's Enumeratio plantarum phanerogamicarum imperii austriaci universi. *See* **Neilreich, A.**

AUSTRIA. Patent law passed March 31, 1832 fol. *Wien*, 1832. pp. 15. *n. t. p. In German.*

——— Die periodische Presse Österreichs. *See* **Winckler**, Johann.

——— Übersicht der Waaren-Ein- und Ausfuhr des allgemeinen österreichischen Zollgebietes. Jahre 1859–62, 1870–71. 4°. 8°. *Wien*, 1860–71.

——— Die Völkerstämme der Österreichisch-Ungarischen Monarchie. *See* **Picker**, Adolf.

Auszug aus dem Tagebuche eines Reisenden durch Grossbritannien und Belgien im Jahre 1841. *Illus.* 4°. *Berlin*, 1842. pp. 71.

AUTOMATA constructed by Orffyreus. *See* **Kenrick**, W.

AUVERGNE, Annales de l'. *See* **Clermont-Ferrand.**

Averill, H. K., *jr.* The chasm of the Au Sable: a set of 22 views. 24°. *Plattsburgh, N. Y.*

Avery, E., and **Hobbs**, G. M. The bankrupt law of the United States: approved March 2, 1867; with notes and an appendix. 8°. *Boston*, 1868.

Axon, William E. A. The mechanic's friend: a collection of receipts and practical suggestions relating to aquaria, bronzing, cement, drawing, dyes, photography, etc. 12°. *New York*, 1875.

Aylmer. The home book. *See* **Valentine**, R.

Ayres, George B. How to paint photographs in water colors: a practical handbook, containing directions for brush-work in all descriptions of photo-portraiture. 12°. *Philadelphia*, 1869. 2 copies.

Ayscough, James. Description of the compound microscope. *See* **Mann**, J.

——— A short account of the eye, and the nature of vision. 8°. *London*, 1752.

Az Árapaly a Fiume Öbölben-Akir, Magyar Természettudomanyi Intalmazott és kiadott Értekezés, irta Stahlberger Emil. 4°. *Budapest*, 1874.

B., A. F. Original designs for wood-carving, with practical instructions in the art. fol. *London*, 1867.

B.— G.—; de Grandpré; et **D.** Nouveau manuel théorique et pratique du serrurier. *Illus.* 3d ed. 18°. *Paris*, 1836. **67 Manuels Roret.**

B., J. F. The velocipede; its past, present, and future. 18°. *London*, 1869.

Digitized by Google

Babbage, Charles. The economy of machinery and manufactures. 4th ed. 16°. *London*, 1841.

——— The ninth Bridgewater treatise; a fragment. 8°. *London*, 1837.

——— Principles of manufactures. *See* **Barlow**, P. Manufactures and machinery of Great Britain.

——— Reflections on the decline of science in England, and some of its causes. 8°. *London*, 1830.

Babinet, Jacques. Études et lectures sur les sciences d'observation, et leurs applications pratiques. 8 v. 24°. *Paris*, 1855–68.

Babo, A. W. v. Illustrirter Weinbau-Kalender für das Schaltjahr 1872. 8°. *Wien*, 1872. pp. 64.

Babo, De. Promenades d'un maître d'école avec ses élèves, ou entretiens sur les sujets agricoles. 12°. *Bruxelles*, 1858.

Babo, L. von. Der Weinbau nach der Reihenfolge der vorkommenden Arbeiten, nebst Anleitung zur Bereitung und Pflege des Weins. 8°. *Frankfurt am Main*, 1855.

BABYLON and Nineveh, The thrones and palaces of. *See* **Newman**, John P.

Bache, Alexander Dallas. Discussion of the magnetic and meteorological observations at Girard college, 1840–45. **Smiths'n contrib., v. 11.**

——— Report on education in Europe to the trustees of Girard college. 8°. *Philadelphia*, 1839.

——— **Henry,** J., and **Pierce,** B. Defence of Dr. Gould. *See* **Henry**, J.

Bache, Franklin. Dispensatory of the U. S. *See* **Wood**, G. B.

Bachiller y Morales, Antonio. Prontuario de agricultura general de Cuba. 8°. *Habana*, 1856.

Bacmeister, T., **Hoyne,** Temple S., and others. Proving of carbolic acid. 12°. Chicago, 1869. pp. 35.

Bacon, Francis, *Lord*, The physical and metaphysical works of, including his 'Dignity and advancement of learning', in 9 books; and his 'Novum organum, or precepts for the interpretation of nature'; by Joseph Devey. 8°. *London*, 1858.

——— Sylva sylvarum; or a natural history in ten centuries: whereunto is newly added, The history, natural and experimental, of life and death; or the prolongation of life. 11th ed. In which is added an epitome of the Novum organum, in English. fol. *London*, 1685.

Bacon, Francis, *Lord*—Continued.

——— An account of Bacon's Novum organum scientiarum. *See* **Hoppus**, J.

——— Rede zur Feier des 104ten Stiftungstages. *See* **Liebig**, J. von.

Bacon, George Washington. Descriptive handbook of America: comprising history, geography, agriculture, manufactures, commerce, railways, mining, finance, government, politics, education, religion, characteristics, public lands, laws, etc. 12°. *London and New York*, 1866.

Bacon, Steuben T., vs. Chambers, C., jr. Circuit court of the U. S., Mass. dist. In equity. 2 v. 8°. *Boston*, 1859.

Bacot, E. Méthodes photographiques; photographie sur albumine. *See* **Chevalier**, C.

Badcock, J. Book of trades. *See* **Whittock**, N., and others.

BADEN, Grand Duchy of. Beiträge zur Statistik der inneren Verwaltung des Grossherzogthums Baden. 2 v. 4°. *Carlsruhe*, 1855.

——— Übersicht der Strafrechtspflege im Grossherzogthum Baden 6 v. 4°. *Carlsruhe*, 1830–48.

Badger, A. G. Illustrated history of the flute, with a description of the Boehm flute. 8°. . . . 1861.

Badham, Charles David. A treatise on the esculent funguses of England; with an account of their classical history, uses, characters, development, structure, nutritious properties, modes of cooking, preserving, etc. 8°. *London*, 1847.

Bagehot, Walter. Physics and politics; or thoughts on the application of the principles of natural science and inheritance to political society. 12°. *New York*, 1873.

Bailey, Alexander Mabyn. The advancement of arts, manufactures, and commerce; or, descriptions of the useful machines and models contained in the repository of the Society for the encouragement of arts, manufactures, and commerce. *Illus.* fol. *London*, 1776.

Bailey, Jacob Whitman. Microscopical examination of soundings off the Atlantic coast. **Smiths'n contrib., v. 2.**

Digitized by Google

Bailey, Jacob Whitman. Microscopical observations made in South Carolina, Georgia, and Florida. **Smiths'n contrib., v. 2.**

—— New species and localities of microscopical organisms. **Smiths'n contrib., v. 7.**

Bailey, N. A new universal etymological English dictionary. Revised by J. N. Scott. fol. *London*, 1772.

Bailey and company. *See* **Silver.**

Baillica d'Avrincourt. Méthodes photographiques; précédé sur collodion. *See* **Chevalier, C.**

Baillon, H. The natural history of plants. Trans. by Marcus M. Hartog. 2 v. roy. 8°. *London*, 1871-72.

Bailly, C. Manuel complet théorique et pratique du jardinier. 1e et 2e parties. 6e éd. 18°. *Paris.* **48 Manuels Roret.**

Bailly, Charles François. Manuel d'astronomie. *Illus.* 3e éd. 18°. *Paris*, 1830. **10 Manuels Roret.**

—— Manuel de physique. *Illus.* 7e éd. 18°. *Paris*, 1-36. **5 Manuels Roret.**

Bailly, Jean Sylvain. Biography. *See* **Arago,** D. F. J. Biography of scientific men.

Bain, Alexander. Mental science: a compendium of psychology, and the history of philosophy. 12°. *New York*, 1868.

Baines, Edward, *jr.* History of the cotton manufacture in Great Britain: its early history in the east, and in all quarters of the globe: description of the great mechanical inventions which have caused its unexampled extension in Britain: present state of the manufacture, and condition of the classes engaged in it. *Illus.* 8°. *London*, 1835.

Baird, Robert. Hive and honey bee; with an introduction by. *See* **Langstroth,** L. S.

Baird, Robert H. American cotton spinner, and managers and carders' guide. 12°. *Philadelphia*, 1851-63.

Baird, Spencer F. Annual record of science and industry for 1871-76. 6 v. 12°. *New York*, 1872-77.

—— Catalogue of North American birds. **Smithsonian miscellaneous collections, v. 2.**

—— Catalogue of North American serpents. **Smiths'n miscellaneous collections, v. 2.**

Baker, Anne Elizabeth. Glossary of Northamptonshire words and phrases; with examples of their colloquial use. 2 v. 8°. *London*, 1854.

Baker, B. On the strengths of beams, columns and arches; considered with a view to deriving methods of ascertaining the practical strength of any given section of beam, etc., in cast iron, wrought iron, or steel. 12°. *London*, 1870.

Baker, Charles R. Practical and scientific fruit culture. 12°. *Boston*, 1866.

Baker, Henry. Microscopes and the discoveries made thereby. v. 1, Microscope made easy; v. 2, Employment of the microscope. 8°. *London*, 1785.

Baker, Henry F. Improvement in steam-boiler furnaces. 8°. *Boston.* pp. 20.

Baker, James L. Exports and imports; showing the relative advancement of every nation in wealth, strength and independence. [Articles contributed to the Boston Transcript.] 8°. *Philadelphia*, 1859. pp. 30.

Baker, John Martin. A view of the commerce of the U. S. and the Mediterranean seaports, including the Adriatic and Morea; with maps of the principal harbors of those seas, and consular, statistical and geographical remarks; from MSS. by his son Louis Baker. 8°. *Philadelphia*, 1847.

Baker, Louis. *See* **Baker,** John Martin.

Baker, Thomas. Elements of mechanism; elucidating the scientific principles of the practical construction of machines. *Illus.* 12°. *London*, 1852. **Weale's series, No. 98.**

—— Elements of mechanism; with numerous specimens of modern machines. *Illus.* 2d ed., with remarks on tools and machines, by James Nasmyth. 12°. *London*, 1858-59. **Weale's series, No. 98, 98*.**

—— The principles and practice of statics and dynamics; embracing a clear development of hydrostatics, hydro-dynamics and pneumatics, with central forces, and superior elevation of exterior rail. 12°. *London*, 1851. **Weale's series, No. 97.**

—— Railway engineering; or field work preparatory to the construction of railways: containing a table for the calculation of earthworks of railway, canals, etc.; also tunnelling, and investigation of the formula for the superelevation of the exterior rail in curves. 8°. *London*, 1848. pp. 64.

Digitized by Google

Baker, Thomas. Rudimentary treatise on mensuration; comprehending the elements of modern engineering. 12°. *London*, 1850. **Weale's series, 93.**

Bakewell, F. C. Manual of electricity, practical and theoretical. 2d ed. *Illus.* 8°. *London and Glasgow*, 1857.

BAKING. Art du boulanger, par P. J. Malouin. *See* PARIS. **Acad. des sc., arts et métiers, v. 41; also v. 1.**

——— Deutsches Bäckerhandwerk. *See* **Schmidt, C. H. 153 Neuer Schauplatz der Künste.**

——— Das Ganze der Brot Bäckerei. *See* **Woltersdorf, E. G. 7 Neuer Schauplatz der Künste.**

——— Manuel du boulanger. *See* **Benoît,** P. M. N., and **Julia de Fontenelle,** J. S. E. **34 Manuels Roret.**

Balch, F. V. Report of the case of the Meteor, steamship; libelled for alleged violation of the neutrality act. 2 v. b'd in one. Proceedings in the district court of U. S. for southern district of New York. 8°. *Boston*, 1869.

Balch, George T. Oarsman's manual. The annual illustrated catalogue for 1871. 4°. *Troy, N. Y.*, 1871.

Baldock, Thomas. Form of steam journal, and memoir of steamship Medea. *See* **Tredgold,** T. **Steam** engine, 1st series.

Baldwin, James F. Measurement of water-power at Lowell. *See* **Francis,** J. B.

Baldwin, Thomas and Thomas J. Lippincott, Gambo & co.'s gazetteer; a new and complete gazetteer of the U. S. 8°. *Philadelphia*, 1854.

Ball, Edward. Inventive drawing; a practical development of elementary design. Chiefly plates. 8°. *London*, 1864. pp. 22.

Ballard, Edward, and **Garrod,** A. B. Elements of materia medica and therapeutics; with additions by R. E. Griffith. 8°. *Philadelphia*, 1846.

Ballhorn, F. Grammatography; a manual of reference to the alphabets of ancient and modern languages. roy. 8°. *London*, 1861.

Balling, Carl A. M. Die Eisenindustrie Böhmens. 8°. *Wien*, 1868.

Balling, Carl J. N. Die Bierbrauerei wissenschaftlich begründet und praktisch dargestellt. 2 v. 8°. *Prag*, 1865.

——— Encyclopädische Zeitscrift des Gewerbewesens. *See* **Encyclopädische.**

BALLOONS. Invention of M. Muzzi. *See* **Muzzi,** M.

BALTIMORE city directory, 1858. *See* **Boyd,** W. H.

——— Mercantile library, Catalogue of, 1851. 8°. *Baltimore*, 1851.

——— ——— Charter, constitution, and regulations of. 8°. *Baltimore*, 1855. pp. 8.

——— and Ohio railroad, Railway structure for a new track on. *See* **Knight,** J., and **Latrobe,** B. H.

——— ——— Co. Annual reports, 18th to 26th. 8°. *Baltimore*, 1844–52.

BAMBERG. Wochenschrift des Gewerbe-Vereins der Stadt Bamberg. 7 v. Jahrg. 16–22, 1867–73. 8°. *Bamberg.*

Bamford, Samuel. Dialect of south Lancashire, or Tim Robbin's Tummus and Meary, with his rhymes. 12°. *London*, 1854.

Bancelin-Dutertre. Agriculture anglaise; situation économique et agricole, modes de culture des comtés de l'Angleterre, trad. par. *See* **Caird.**

Bancroft, Edward. Experimental researches concerning the philosophy of permanent colors, and the best means of producing them, by dyeing, calico printing, etc. 2 v. 8°. *Philadelphia*, 1814.

BANDAGES and splints. *See* **Clarke,** Wm. Fairlie.

BANDAGING, and other operations of minor surgery. *See* **Sargent,** F. W.

Bandlin, O. Die Gifte und ihre Gegengifte. 3 v. *Basel*, 1869–73.

BANGOR slate quarries. By S. Hughes. **Weale's papers on engineering, v. 3.**

Banister, Henry. Gas manipulation, with a description of the various instruments and apparatus employed in the analysis of coal and coal gas. Enlarged by Wm. T. Sugg. 8°. *London*, 1867.

BANK bookkeeping. *See* **Marsh,** C. C.

Banker's magazine, The, and statistical register; ed. by J. Smith Homans; from July, 1846–1876. *Baltimore, Boston, and New York*, 1847–76.

BANKING. Manuel du banquier. *See* **Peuchet. 28 Manuels Roret.**

——— Remarks on alterations proposed in the banking system. *See* **Tooke,** T. History of prices.

Banks, John. On the power of machines, etc. 8°. *Kendal*, 1803.

——— A treatise on mills. 8°. *London*, 1795.

BANKS. Die Banken. *See* **Hübner,** O.

Digitized by Google

BANKS. Le casse di risparmio nel 1864. *See* ITALY. Statistica del regno d'Italia.

Bannister, James. A view of the arts and sciences, from the earliest times to the age of Alexander the Great. 12°. *London*, 1785.

BANQUET of the learned. *See* **Athenæus.**

Barba, J. The use of steel for constructive purposes; method of working, applying, and testing plates and bars. Trans. from the French, by Alex. L. Holley. 12°. *New York*, 1875.

Barbançois, Charles Hélion, *marquis* de, Lettre de, sur une manière de conserver les grains par une disposition analogue à celle proposée par M. Dartigues, T. 9, sér. 2, Annales d'agriculture. 8°. *Paris*, 1821. pp. 38.

Barber, Edm., **Tring** and **Herts.** Der erfahrene Gehülfe für Haus- und Stubenmaler und Firmaschreiber, als Ergebniss langjähriger Erfahrung der Londoner Haus- und Stubenmaler E. Barber, Tring und Herts. Aus dem Englischen übersetzt und mit Zusätzen versehen von Emanuel Schreiber. 8°. *Weimar*, 1853. **204 Neuer Schauplatz der Künste.**

Barber, John W., and **Howe,** Henry. Western States and Territories, from the Alleghanies to the Pacific, and from the lakes to the Gulf. 8°. *Cincinnati*, 1862.

BARBERS and hair dressers' private recipe book. *See* **Belcher,** N.

Barbot, Charles. Traité complet des pierres précieuses; contenant leur étude chimique et minéralogique. 12°. *Paris*, 1858.

Barclay, John M. Digest of rules of House of Representatives, U. S.; joint rules of both houses, etc., arranged alphabetically. 8°. *Washington*, 1867.

Barclay, J. T. City of the Great King; or Jerusalem as it was, is, and is to be. roy. 8°. *Philadelphia*, 1858.

Baretti, Joseph. Dictionary, English and Spanish, and Spanish and English. 2 v. 4°. *London*, 1786.

—— Dictionary of the Italian and English languages, based on that of Baretti; compiled by John Davenport and Gulielmo Comelati. v. 1, Ital. and Eng.; v. 2, Eng. and Ital. 8°. *London*, 1854.

—— Dictionary of the Spanish and English languages. *See* **Neuman,** H.

Barfuss, Friedrich Wilhelm. Die Kunst des Böttchers oder Küfers. Zweite verbesserte und vermehrte Auflage mit einem Anhange über die Vorrichtungen des Küfers im Bier- und Weinkeller von Chr. H. Schmidt. *Illus.* 8°. *Weimar*, 1847. **102 Neuer Schauplatz der Künste.**

—— Handbuch der Mühlenbaukunst, hrsg. v. *See* **Weinholz,** W.

—— Optik, Catoptrik, und Dioptrik, oder theoretisch-practischer Unterricht über den möglichst vollkommenen Bau aller optischen Instrumente. *Illus.* 8°. *Weimar*, 1839. **3 Neuer Schauplatz der Künste.**

Barker, William. Resources of Ireland. *See* **Sproule,** J.

Barlow, Geo. Hilaro. Manual of the practice of medicine; additions by D. Francis Condie. 8°. *Philadelphia*, 1856.

Barlow, H. B. Comparative account and delineation of railway engine and carriage wheels, with a card. 8°. *London*, 1848. pp. 31. [Card missing.]

Barlow, Peter. An essay on magnetic attractions, and the laws of terrestrial and electro magnetism; with an appendix, containing results of experiments made on shipboard, from lat. 61° S. to lat. 80° N. 2d ed. *Illus.* 8°. *London*, 1824.

—— Principles of carpentry, ed. by. *See* **Tredgold,** T.

—— Treatise on the manufactures and machinery of Great Britain; with an introductory view of the principles of manufactures, by Charles Babbage. Text and plates. 4°. *London*, 1836.

—— Treatise on the strength of materials, with rules for application in architecture etc.; rev. by P. W. and W. H. Barlow, and ed. by W. Humber. 8°. *London*, 1867.

—— Treatise on the strength of timber, cast and malleable iron, and other materials, with rules for application in architecture; the construction of suspension bridges, railways, etc., and an appendix on the power of locomotive engines, and the effect of inclined planes and gradients. With plates. Rev. by I. F. Heather. Essay on the effects produced by causing weights to travel over elastic bars, by Robert Willis. *Illus.* 8°. *London*, 1851.

Digitized by Google

Barlow, Peter, and **Wood,** Nicholas. Recherches sur les rails et leurs supports, extrait des ouvrages anglais de P. Barlow et N. Wood. Suivi de la description des rails et des coussinets employés sur les principaux chemins de fer d'Europe et d'Amérique, et de notes sur la durée, la résistance et les dimensions des rails, coussinets, traverses, longrines, des chevilles et coins, ainsi que sur la conservation des bois, et les conditions à imposer aux fabricants de rails et de coussinets, par E. Locard. 8°. pl. 4°. *Paris*, 1853.

Barlow, P. W. Motion of steam vessels. *See* **Tredgold,** T. **Steam** engine, 1st series.

Barlow, Thomas Greaves. Journal of gaslighting, ed. by. *See* **Journal.**

Barlow, W. H. Construction of oblique bridges. **Weale's papers on engineering, v. 4.**

Barlowe, Wm. Magnetical advertisements, or diverse pertinent observations and approved experiments concerning the nature and property of the loadstone. With notes by W. Sturgeon. 12°. *London*, 1843.

Barnard, George. Theory and practice of landscape painting in water colors. 4°. *London*, 1861.

Barnard, Henry. American journal of education. *See* **American.**

——— Builder's guide; rev. by. *See* **Hills,** C.

——— Educational biography; memoirs of teachers and educators, promoters, and benefactors of education, literature and science; from American journal of education. Pt. 1. 2d ed. 8°. *New York*, 1861.

——— National education in Europe; an account of the organization, administration, instruction and statistics of public schools in the principal states. 2d ed. 8°. *Hartford*, 1854.

——— Papers for the teacher. From American journal of education. 7 v. 8°. *New York and Hartford*, 1860–63.

——— Papers on preventive, correctional, and reformatory institutions and agencies in different countries. 8°. *Hartford*, 1857.

——— School architecture; contributions to the improvement of school houses in the U. S. 6th ed. 8°. *New York*, 1860.

Barnard, Henry. Tribute to Gallaudet: discourse in commemoration of the life, character and services of Thos. H. Gallaudet; containing a history of deaf-mute instruction and institutions; and other documents. 2d ed. 8°. *New York*, 1859.

Barnard, J. G. Isthmus of Tehuantepec; the results of a survey for a railroad to connect the Atlantic and Pacific oceans, made by the scientific commission under bureau U. S. engineers. 8°. *New York*, 1852.

Barnard, W. C. Art of designing and manufacturing woollen cloth: with tables giving the dents in reed, runs, twists, yards, ounces, picks, number of threads, etc., finishing department, gigging-room and fulling-room. 12°. *Boston*, 1869.

Barnard & co. Price current of drugs. 8°. *St. Louis*, 1859.

Barnes, Robert Freeman. The dry collodion process. 2d ed. 8°. *London*, 1857. pp. 42.

Barnet, J. Coast pilot, for the lakes on both shores, from Chicago to Buffalo; description of all the lights and lighthouses. 4th ed. 8°. *Chicago*, 1867.

BARNS, outbuildings and fences. *See* **Harney,** Geo. E.

BARN-YARD, and bee-keeping. *See* **Jacques,** D. H.

BAROMETER, Description of the new air. *See* **Adie,** A.

——— Treatise on the aneroid. *See* **Dent,** E. J.

Baron, L. Terres cultivables, amendements et engrais. 24°. *Paris, n. d.*

Barr, James. Anglican church architecture; remarks on ecclesiastical furniture. 2d ed. 12°. *Oxford*, 1843.

Barral, J. Agustin. Le bon fermier; aide-mémoire du cultivateur. *Illus.* 12°. *Paris*, 1858.

——— Dictionnaire des arts. *See* **Laboulaye,** C. L.

——— Journal d'agriculture, publié sous la direction de. *See* **Journal.**

Barralt, Joseph. Eupatoria verticillata; specimens to illustrate the N. Amer. verticellate species and varieties of the genus eupatorium, with synonyms and references. 4°. *Middletown, Conn.*, 1841. 2 copies.

——— North American carices. 4°. *Middletown, Ct.*, 1840.

Digitized by Google

Barralt, Joseph. Salices Americanæ; N. American willows. 4°. *Middletown, Ct.*, 1840. pp. 16.

Barrault, Alexis. Dictionnaire des arts. *See* **Laboulaye,** C. L.

Barreswil, Ch. *See* PARIS. **Bulletin** de la Société chimique.

Barreswil, Charles Louis, and **Davanne.** Chimie photographique. *Illus.* 2e éd. 8°. *Paris.* Also 3e éd.

——— and **Girard,** Aimé. Dictionnaire de chimie industrielle; avec la collaboration de M. de Luca. 4 v. Introduction, etc. T. 1-3. 8°. *Paris*, 1861-63.

Barrett, Joseph H. Life of Abraham Lincoln, presenting his early history, political career, and speeches, in and out of Congress; a general view of his policy as president; his messages, proclamations, letters, etc.; and a concise history of the war. 8°. *Cincinnati*, 1864.

——— Same, containing account of his death. 8°. *Cincinnati and New York*, 1865.

Barretta, Charles Joseph. Manuel complet théorique et pratique du chocolatier, limonadier, distillateur-liquoriste, confiseur, pâtissier suisse; suivi d'un traité sur l'art de faire et de conserver les vins et les vinaigres de table et de toilette. 8°. *Paris*, 1841.

Barrington, Archibald. A familiar introduction to heraldry, explaining the principles of the science. 12°. *London*, 1848.

Barrlay, C. J. Anleitung zur Erkennung und Prüfung photographischer Chemikalien. 12°. *Köln*, 1864. pp. 83.

Barron, J. Description of pocket and magazine cases of mathematical instruments. 8°. *London, n. d.*

Barruel, G. Traité de chimie technique appliquée aux arts et à l'industrie, à la pharmacie et à l'agriculture. T. 1-5. 8°. *Paris*, 1856-60.

Barry, P. Horticulturist, ed. by. *See* **Horticulturist.**

Barry, P. Dockyard economy and naval power. 8°. *London*, 1863.

——— Shoeburyness and the guns: a philosophical discourse. 8°. *London*, 1865.

Barstow, G. Forrester. Railroad accidents; translated by. *See* **With,** E.

Barth, E., and **Niederley,** W. Des deutschen Knaben Handwerksbuch. 8°. *Bielefeld und Leipzig*, 1873.

Bartholomew, Alfred. Specifications for practical architecture, preceded by an essay on the decline of excellence in the structure and science of modern English buildings; with remedies. *Illus.* 2d ed. 8°. *London*, 1846.

Bartholow, Roberts. Manual of hypodermic medication. 8°. *Philadelphia*, 1869.

——— The principles and practice of disinfection. 12°. *Cincinnati*, 1867.

——— On spermatorrhœa; its causes, symptomatology, pathology, prognosis, diagnosis, and treatment. 12°. *New York*, 1866.

Bartlett, Mrs. Ladies' guide to the art of making paper flowers, with an introductory by James Shirley Hibberd. 12°. *London*, 1850. pp. 31.

Bartlett, John Russell. Dictionary of Americanisms: a glossary of words and phrases usually regarded as peculiar to the U. S. 2d ed. 8°. *Boston*, 1859.

——— Personal narrative of explorations and incidents in Texas, New Mexico, California, Sonora, and Chihuahua, with the U. S. and Mexican boundary commission, 1850-53. 2 v. roy. 8°. *New York*, 1854.

Bartlett, Wm. H. C. Elements of analytical mechanics. 8°. *New York*, 1853.

——— Elements of natural philosophy. Sec. 1. Mechanics. 2. Acoustics. 3. Optics. 4. Spherical astronomy. 8°. *New York*, 1850-55.

Bartol, B. H. Treatise on the marine boilers of the U. S. 8°. *Philadelphia*, 1851.

Barton, William. Memoirs of the life of David Rittenhouse. 8°. *Philadelphia*, 1813.

Barton, Wm. P. C. Flora of N. America. Illustrated by colored figures drawn from nature. v. 1. 4°. *Philadelphia*, 1821.

Bartow, F. Every man his own horse doctor; or the true way of handling horses. 18°. *Romeo*, 1868.

Bartram, John, and **Marshall,** Humphrey, Memorials of. *See* **Darlington,** Wm.

BASE-BALL guide for 1868. *See* Kelley, M. J.

——— player. *See* **Beadle's** dime handbooks.

BASLE. Bericht der Gewerbeschule zu Basel. 1867-8. 4°. *Basel*, 1868. pp. 41.

Digitized by Google

Bashforth, Francis. Observations at the Menai bridge during storms. **Weale's papers on engineering, v. 4.**

BASKET making. Die Korbflechtkunst. *See* **Schmied, C. 77 Neuer Schauplatz der Künste.**

Basset, N. Traité pratique de la culture et de l'alcoolisation de la betterave. 18°. *Bruxelles*, 1858.

Bassié, Gustave Adolphe. Système mnémonique ou art d'aider la mémoire. 8°. *Londres*, 1841.

Bassnett, T. Outlines of a mechanical theory of storms; the true law of lunar influence. 12°. *New York*, 1854.

Bastenaire, Daudenart. Die Kunst ordinäre Töpferwaare sowie auch Ofentafeln, feines und ordinäres Steinzeug mit den entsprechenden Glasuren anzufertigen. Nebst Beschreibung der neuesten Brennöfen, Glasurmühlen, Drehscheiben und sonstigen Maschinen. Aus dem Französischen übertragen von Ch. H. Schmidt. 2d ed. *Illus.* 8°. *Weimar*, 1843. **88 Neuer Schauplatz der Künste.**

——— Die Kunst weisses Steingut mit durchsichtiger Glasur nach Art der Franzosen und Engländer anzufertigen; nebst einer Abhandlung über die im Muffelfeuer eingeschmolzenen Steingutfarben. Aus dem Französischen übertragen von Georg Frick. *Illus.* 8°. *Ilmenau*, 1832. **56 Neuer Schauplatz der Künste.**

Bastian, H. Charlton. The beginnings of life; account of the nature, modes of origin and transformation of lower organisms. 2 v. 12°. *New York*, 1872.

Bastiat, Fr. Sophisms of the protective policy; tr. from 2d French ed. by Mrs. D. J. McCord; introductory letter by Francis Lieber. 12°. *New York*, 1848.

Bataille, Eugène M., and **Jullien,** C. E. Traité des machines à vapeur. Ouvrage divisé en deux grandes sections; accompagné d'un grand nombre de planches. 4°. *Paris*, 1847-49.

BATAVIA, *East Indies.* Catalogus der bibliotheek van het Bataviaasch genootschap van kunsten en wetenschappen door J. A. Van der Chijs. 8°. *Batavia*, 1864-72.

——— Catalogus der ethnologische afdeeling van het museum van het Bataviaasch genootschap van kunsten en wetenschappen; en catalogus der numismatische afdg. 2 v. 8°. *Batavia*, 1868-69.

BATAVIA, *East Indies.* Notulen van de algemeene en bestuurs vergaderingen van het Bataviaasch genootschap van kunsten en wetenschappen. Deel 1-10. 8°. *Batavia*, 1864-72.

——— Tijdschrift voor Indische taal-, land- en volkenkunde. Uitgegeven door het Bataviaasch genootschap van kunsten en wetenschappen. Onder redactie der Heeren P. Bleeker, J. Munich en E. Netscher. Deel 1-7, 9-19. 8°. *Batavia*, 1854-70.

——— Verhandelingen van het Bataviaasch genootschap van kunsten en wetenschappen. Deel 5-28 and 29-36. 8° and 4°. *Batavia*, 1827-72.

Bate, John. Mysteries of nature and art. 4 parts: 1. Water. 2. Fireworks. 3. Drawing, washing, limning, painting, and engraving. 4. Sundry experiments. 2d ed. 12°. 1635.

Bateman, M. B. Ohio cultivator, ed. by. *See* OHIO.

Bates, David. Logarithmic tables of all numbers from 1 to 10,000, etc. sm. 4°. *Dublin*, 1781.

Bates, Saml. W. Cases relating to railways and canals, ed. by. *See* **Nicholl, T. J., and others.**

——— Cases relating to the law of railways. *See* **Smith, C.**

BATH and West of England society for the encouragement of agriculture, arts, manufactures and commerce. v. 7-12. 8°. *London*, 1859-64.

BATHING. Patent, portable, warm and hot bath. *See* **Jennings, Samuel, R.**

——— Vapor bath. *See* **Gibney, J.**

BATIS maritima of Linnæus; observations on, by J. Torrey. **Smiths'n contrib., v. 6.**

Baucher, F. Method of horsemanship, founded on new principles; breaking and training horses, with instructions for obtaining a good seat. Tr. from 9th Paris ed. 12°. *Philadelphia*, 1851.

Baude. Rapport sur les travaux de fond du pont du Rhin. *See* **Castor, A.**

Baudrimont, A., and others. Dictionnaire de l'industrie manufacturière, commerciale et agricole. Ouvrage accompagné d'un grand nombre de figures intercalées dans le texte. T. 1-10. roy. 8°. *Paris*, 1835-41.

Baudrimont, Alexandre Édouard, and others. Dictionnaire de l'industrie ma-

Digitized by Google

Baudrimont, A. É., and others—Cont'd. nufacturière, commerciale et agricole. T. 1–4. sm. 8°. *Bruxelles*, 1837–40.

Bauer, Heinrich. Das goldene Buch oder der ökonomische Hausschatz. 1 v. 8°. *Leipzig*, 1849.

Bauer, Louis. Lectures on orthopedic surgery, at Brooklyn medical and surgical institute. *Illus.* 8°. *Philadelphia*, 1864.

Bauerman, H. Treatise on the metallurgy of iron; outlines of history of manufacture, methods of assay, analysis of ores, etc. 1st Am. ed. Appendix by Abram S. Hewitt. 12°. *New York*, 1868.

Bauernfeind, Carl Maximilian. Elemente der Vermessungskunde. Band 1–2. *Illus.* 8°. *München*, 1856–58.

——— Tafeln ueber verschiedene Gegenstände der practischen Geometrie. Anhang der Elemente der Vermessungskunde. 8°. *München*, 1858. pp. 56.

——— Vorlegeblätter zur Brückenbaukunde, mit erläuterndem Texte. 4°. *München*, 1853. pp. 23.

——— Vorlegeblätter zur Strassen- und Eisenbahn-Baukunde, mit erläuterndem Texte und einer Abhandlung ueber Erdabgleichung. 4°. *München*, 1856. pp. 22.

——— Vorlegeblätter zur Wasserbaukunde; mit erläuterndem Texte. fol. *München*, 1866.

Baumes, M. Treatise on first dentition, and the disorders which depend on it. Tr. from the French by Thos. E. Bond. 8°. *New York*, 1841. **American library of dental science, v. 2.**

Baumgartner, Andreas. Die Naturlehre nach ihrem gegenwärtigen Zustande, mit Rücksicht auf mathematische Begründung. 8te vermehrte und umgearbeitete Auflage. Mit 10 Kupfertafeln. 8°. *Wien*, 1845.

BAUNSCHEIDTISM, or a new method of cure: an exposition of the laws of therapeutics, as discovered and taught by Charles Baunscheidt. Trans. from German by Theophilus G. Clewell. 8°. *Cleveland, O.*, 1865.

BAVARIA. Academy of sciences. *See* MUNICH.

——— Landwirthschaftlicher Verein in Bayern. Centralblatt. 13 v. 8°. *München*, 1843–68.

——— ——— Haus- und Landwirthschafts-Kalender. 19 v. 4°. *München*, 1850–69.

BAVARIA. Landwirthschaftlicher Verein in Bayern. Die Landwirthschaft in Bayern. Denkschrift zur Feier des fünfzigjährigen Bestandes. 8°. *München*, 1860.

——— ——— Repertorium oder systematisch geordneter Realindex für die ersten 25 Jahrgänge des Wochenblattes. 8°. *München*, 1840.

——— ——— Zeitschrift. Jhrg. 1–41, 1–11–51; 44–50, 1854–60. *München.*

Note.—Jhrg. 1–10, 1811–20, are entitled "Wochenblatt des Landw. Vereins in Bayern"—12°; Jhrg. 11–25, 1820–35, "Neues Wochenblatt"—u. s. w., 4°; Jhrg. 26, 1835, "Neues Central-Wochenblatt"—u. s. w., 4°; Jhrg. 27, 1836, to Jhrg. 45, 1855, "Centralblatt"—u. s. w., 8°; Jhrg. 46, 1856, to Jhrg. 50, 1860, "Zeitschrift"—u. s. w.

——— Ueber die Gliederung der Bevölkerung des K. Bayern. *See* **Hermann,** T. B. W. von.

Baxter, J. H. Statistics, medical and anthropological, of the provost-marshal-general's bureau, from records of the examination for military service in the armies of the U. S. during the late war of the rebellion of over 1,000,000 recruits. 2 v. 4°. *Washington*, 1875.

Baynes, *Mrs.* G. J. The knitted lace collar receipt book. 3d ser. 2d ed. 32°. *London.* pp. 24. Bound with 1st series. Also 5th ed.

BAZAR, Harpers'. *See* **Harpers' Bazar.**

Beadle's dime hand books: 1. Base-ball player. 18°. *New York*, 1868.

——— 2. Croquet, by Edm. Routledge, with rules. 18°. *New York*, 1866.

——— 3. Cricket and football. 18°. *New York*, 1866.

BEAGLE, Her majesty's ship. Natural history and geology of countries visited by the. *See* **Darwin,** C.

Beale, Lionel S. How to work the microscope. *Illus.* 8°. *London*, 1861.

——— Microscope and its application to clinical medicine. 8°. *London*, 1854.

Beamish, Richard. Memoir of the life of Sir Marc Isambard Brunel. 8°. *London*, 1862.

BEAMS, Architectural sections of cast-iron. *See* **Turnbull,** W.

——— Dimensionen gusseiserner Träger. *See* **Cohen,** L. P.

Beasley, Henry. Druggists' general receipt-book: copious veterinary formulary; tables of veterinary materia medica; recipes in patent and proprietary

Digitized by Google

Beasley, Henry—Continued.
medicines; druggist's nostrums, perfumery and cosmetics, beverages, dietetic articles and condiments; trade chemicals, etc.; appendix of useful tables. 3d Am. ed. 8°. *Philadelphia*, 1857.

——— Medical formulary; standard and approved formulæ for the preparations and compounds employed in medical practice. 8°. *Philadelphia*, 1856.

Beaudemoulin, Louis Alexis. Recherches théoriques et pratiques sur la fondation par immersion des ouvrages hydrauliques, et particulièrement des écluses. 4°. *Paris*, 1829. pp. 83.

Beaufoy, Mark. Nautical and hydraulic experiments, with numerous scientific miscellanies. *Illus.* v. 1. (3 v.) 4°. *London*, 1834.

Beaulieu, Ad. Lehardy de. *See* **Lehardy de Beaulieu, A.**

Beaume, Alexandre. Code de la propriété industrielle, littéraire et artistique. *See* **Blanc,** E.

Beaumont, Wm. Experiments and observations on the gastric juice and the physiology of digestion. 8°. *Plattsburgh*, 1833.

——— Physiology of digestion, with experiments on the gastric juice. 2d ed. 12°. *Burlington, Vt.*, 1847.

Beautemps-Beaupré, C. F. Méthodes pour la levée et la construction des cartes et plans hydrographiques. 4°. *Paris*, 1808.

BEAUTIFUL leaved plants. *See* **Lowe,** E. J.

Beauvais, Raseau de. Art de l'indigotier. *See* PARIS. **Acad. des sc., arts et métiers, v. 40; also v. 8.**

Beavan, Edward. Cases relating to railways and canals. *See* **Nicholls,** T. I., and others.

Becher, Albrecht. Treatise on American engineering. *See* **Mone,** F.

Beck, John B. Essays on infant therapeutics; observations on ergot. 2d ed. 8°. *New York*, 1852.

——— Lectures on materia medica and therapeutics, in College of physicians and surgeons of the University of New York. 8°. *New York*, 1851.

Beck, Richard. Treatise on the construction, use, and capabilities of Smith, Beck and Beck's achromatic microscopes. 8°. *London*, 1865.

Becker, Bernard H. Scientific London. 12°. *New York*, 1875.

Becker, Max. Der Brückenbau in seinem ganzen Umfange und mit besonderer Rücksicht auf die neuesten Constructionen, mit Atlas. *Illus.* T. 8°. pl. 4°. *Stuttgart*, 1858.

Becker, W. A. Der Backstein-Rohbau. *See* **Fleischinger, A. F.**

——— Practische Anleitung zur Anwendung der Cemente zu baulichen, gewerblichen, landwirthschaftlichen und Kunst-Gegenständen. fol. *Berlin*, 1868.

Beckers, A. Das Gesammte der Färberei und Druckerei mit Anilin-Farbstoffen, auf Wolle, Baumwolle und Seide. Ed. 1 and 2. 2 v. 8°. *Berlin*, 1864–71.

Becket, J. B. Use of the hydrostatic balance made easy, and applied particularly to the purpose of detecting counterfeit gold coin. 8°. *Bristol*, 1775.

Beckmann, Johann. A history of inventions and discoveries. Tr. from German by Wm. Johnston. 3 v. 8°. *London*, 1797.

——— A history of inventions, discoveries and origins. Tr. from German by Wm. Johnston. 4th rev. ed. by Wm. Francis and J. W. Griffith. 2 v. 8°. *London*, 1846.

Beckmann, Ludwig. Theoretisch-practisches Handbuch des Wagners und Chaisenfabrikanten. Mit einem Atlas, und einem Anhange betreffend die Construction der Eisenbahnwaggons. Nach Lebrun und den neuesten Fortschritten dieses Gewerbes herausgegeben. 8°. *Weimar*, 1848. **65 Neuer Schauplatz der Künste.**

Becquerel, Alexandre Edmond. Process for producing daguerreotypes with the colors of nature. *See* **Humphrey,** S. D. **System** of photography.

Becquerel, Antoine César. Des engrais inorganiques en général et du sel marin (chlorure de sodium) en particulier. 12°. *Paris*, 1848.

——— Éléments d'électro-chimie appliquée aux sciences naturelles et aux arts. 8°. *Paris*, 1843.

——— and Alexandre Edmond. Traité d'électricité et magnétisme, et des applications de ces sciences à la chimie, à la physiologie et aux arts. T. 1–3. 8°. *Paris*, 1855–56.

Digitized by Google

Bede. King Alfred's version of Bede's ecclesiastical history. *See* **Klipstein**, Louis F.

Bède, E. De l'économie du combustible, ou exposé des principaux moyens usités ou proposés pour produire et employer économiquement la vapeur servant de force motrice. 8°. *Paris et Liége*, 1859.

Bedford, Gunning S. Clinical lectures on the diseases of women and children. 8°. *New York*, 1855.

Bedford, John W. American arithmetical investigator. 12°. *Syracuse*, 1850.

Bedos de Celles, François. Art du facteur d'orgues, par. Attribué à J. F. Monniotte. PARIS. **Acad. roy. des sc., arts et métiers, v. 21, 22.**

Beecher, Catharine E. Physiology and calisthenics, for schools and families. 16°. *New York*, 1856.

Beechey, *Sir* Fred. Wm. Hydrography. *See* **Herschel**, *Sir* J. F. W. **Manual** of scientific enquiry.

Beekmann, J. P. The cultivator; ed. by. *See* **Cultivator.**

Beer, August. Einleitung in die höhere Optik. *Illus.* 8°. *Braunschweig*, 1853.

Beer, August Heinrich. Erdbohrkunde. Ein Abschnitt aus den Aufschluss- und Ausrichtungs-Arbeiten der allgemeinen Bergbaukunde. 8°. *Prag*, 1858.

BEER. Bau von Eiskellern und Eisbehältern mit Lagerräumen. *See* **Schlesinger**, Isidor.

——— De la bière. *See* **Mulder**, G. J.

BEES. American bee-journal. *See* **American.**

——— The apiary, etc. *See* **Neighbour**, Alfred.

——— Bee-keeper's manual. *See* **Miner**, T. B.

——— Bee-keeper's manual. *See* **Taylor**, H.

——— Bee-keeper's text book. *See* **King**, N. H. and H. A.

——— Die Bienenzeitung. *See* **Bienenzeitung.**

——— Die Bienenzucht, etc. *See* **Melichor**, Ludwig Josef.

——— Die Bienenzucht. *See* **Vogel**, Fried. Wilh.

——— The culture of. *See* **Duvernay**, *aîné.*

——— The English beekeeper. *See* **English.**

——— Histoire naturelle des abeilles. *See* **Féburier.**

——— Hive and honey-bee. *See* **Langstroth**, L. L.

BEES. Hive and honey-bee. *See* **Richardson**, H. D.

——— The honey-bee, its natural history, etc. *See* **Samuelson**, J.

——— Humanity to honey-bees. *See* **Nutt**, T.

——— Manual del apicultor. *See* **Ramon de Villalon y Hechavarria**, José.

——— Manuel des propriétaires d'abeilles. *See* **Radouan**, J. **90 Manuels Roret.**

——— Mysteries of bee-keeping. *See* **Quimby**, M.

——— Natural history of. *See* **Huber**, F.

——— Natural history and management. *See* **Huish**, R.

——— Natural history, physiology and management. *See* **Bevan**, E.

——— The shilling bee book. *See* **Golding**, R.

BEESWAX. Der Wachsfabrikant. *See* **Thon**, G. P. F.

——— press. Rapport sur une presse propre à retirer le miel des gâteaux de cire. *See* **Mollard** and **Bosc.**

BEETLES. Verzeichniss der Käfer Deutschlands. *See* **Kraatz**, G.

Beeton, S. O. Dictionary of universal information; comprising geography, history, biography, mythology, Bible knowledge, chronology, with the pronunciation of every proper name. 8°. *London, s. d.*

BEET-SUGAR. Der praktische Rübenzuckerfabrikant. *See* **Walkhoff**, Louis.

——— Die Runkelrübenzucker-Fabrikation Frankreichs. *See* **Löffler**, Karl.

BEETS. La culture et l'alcoolisation de la betterave. *See* **Basset**, N.

——— Die Runkelrüben-Branntweinbrennerei. *See* **Payen**, A.

——— Saftgewinnung aus Runkelrüben. *See* **Schmidt**, C. H.

BEGINNINGS of life. *See* **Bastian**, H. Charlton.

BEHAVIOR book. *See* **Leslie**, *Miss.*

Behse, W. H. Treppenwerk für Architekten, Zimmerleute und Tischler, sowie für Baugewerk- und Gewerbeschulen, oder vollständige Abhandlung der Treppen in Holz. 4°. *Weimar*, 1873.

Beil, J. A. Technologisches Wörterbuch der deutschen, französischen und englischen Sprache. Mit einem Vorwort von Karl Karmarsch. 1te B. Deutsch-Französisch-Englisch, von J. A. Beil. 2d v. English-German-French, by Prof. Franke. 3me v. Français-Allemand-Anglais, par E. Althans et autres. 8°. *Wiesbaden*, 1853–55.

Digitized by Google

Beilstein, F. Die chemische Grossindustrie auf der Weltausstellung zu Wien im Jahre 1873. 8°. *Leipzig*, 1873.

Bélanger, Jean Baptiste Charles Joseph. École royale des ponts et chaussées, session 1845–6. Notes sur l'hydraulique.

Belcher, E., Sailor's word book; rev. by. *See* **Smyth,** W. H.

Belcher, N. The barbers and hairdressers' private recipe book; with a treatise on the diseases of the human hair. 18°. *Boston*, 1868.

BELGIUM. Album de l'exposition de 1855. *See* **Album.**

——— Annales des travaux publics de Belgique. T. 1, 2. 8°. *Bruxelles*, 1843–44.

——— Annuaire de l'industrie belge. *See* **Annuaire.**

——— Bulletin du conseil supérieur d'agriculture. 13 v. 4°. *Bruxelles*, 1847–60.

——— Canons rayés en Belgique. *See* **Canons.**

——— Catalogue systématique de la bibliothèque de la chambre de représentants. 8°. *Bruxelles*, 1844. 1er à 3me supplément, 1847–59.

——— Compte-rendu des opérations de l'exercice, 1854. Rapport présenté aux chambres législatives, par M. le ministre des travaux publics. 3 v. 1. 8°. *Bruxelles*, 1851–59.

——— Documents statistiques, publiés par le département de l'intérieur, avec le concours de la commission centrale de statistique. 5 v. 4°. *Bruxelles*, 1857–61.

——— Enquête sur la condition des classes ouvrières, et sur le travail des enfants. 3 v. 8°. *Bruxelles*, 1846–48.

——— Machines à vapeur; arrêtés et instructions; aussi rapport de M. Jobard, sur l'explosion à une houillère du Flenu. 8°. *Bruxelles*, 1844. pp. 37.

——— Projet de loi sur la propriété industrielle. 8°. *Bruxelles*, 1852. pp. 20.

——— Recueil spécial des brevets d'invention publié en exécution de l'art. 20 de la loi du 24 mai 1854–75. Texte, T. 1–22, 8°. Planches, T. 1–22, bound in 3 v. folio. *Bruxelles*, 1854–75.

——— De la réforme des impôts en Belgique: comme moyen de soulager le paupérisme. *See* **Heuschling,** X.

——— The shrapnel shell in. *See* **Bormann,** *Maj.-Gen.*

——— Statistique de la Belgique. Mines, minières, usines minéralurgiques, et machines à vapeur, années 1850–55. 2 v. fol. *Bruxelles*, 1855–58.

BELGIUM—Continued.

——— ——— Tableau général du commerce avec les pays étrangers, pendant les années 1841–59. fol. *Bruxelles*, 1842–60.

——— Statistique générale de la Belgique. Exposé de la situation du royaume, période décennale de 1841–50. 4°. *Bruxelles*, 1852.

——— Sur l'accroissement de la population de la Belgique, 1831–40. *See* **Heuschling,** X.

——— Sur le mouvement de l'état civil en Belgique, 1841–44. *See* **Heuschling,** X.

——— Tagebuch eines Reisenden durch Belgien. *See* **Auszug.**

——— Travaux publics en Belgique, 1830–39. Chemins de fer et routes ordinaires: rapport par M. Nothomb. 2e éd. 8°. *Bruxelles*, 1840.

Belidor, Bernard Forest de. Architecture hydraulique, ou l'art de conduire, d'élever, de ménager les eaux. 2 parts, 2 v. in each. 4°. *Paris*, 1739–1819.

——— Dictionnaire portatif de l'ingénieur et de l'artilleur, composé originairement, nouvelle éd., totalement changée, refondue et augmentée du quadruple, par Charles Antoine Jombert. 8°. *Paris*, 1768.

Bell, *Sir* Charles. The anatomy and philosophy of expression as connected with the fine arts. 5th ed. roy. 8°. *London*, 1865.

——— Animal mechanism. 8°. *London.* Bound in a vol. entitled Tracts. *n. t. p.* pp. 63.

Bell, J. Lowthian. Chemical phenomena of iron smelting; an experimental and practical examination of the circumstances which determine the capacity of the blast furnace, the temperature of the air, etc., and the proper condition of the materials to be operated on. 8°. *London*, 1872.

——— Ueber die Entwicklung und Verwendung der Wärme in Eisenhohöfen. Trans. into German by P. Tunner. 8°. *Leipzig*, 1870.

Bell, Jacob. Chemical and pharmaceutical processes and products. *See* **Lectures** on the results of the exhibitions.

——— Pharmaceutical journal and transactions. *See* **Pharmaceutical.**

Digitized by Google

Bell, John. The mineral and thermal springs of the U. S. and Canada. 16°. *Philadelphia,* 1855.

——— The principles of surgery, as they relate to wounds, ulcers, fistulæ, aneurisms, wounded arteries, fractures of the limbs, tumors, the operations of trepan and lithotomy; the duties of military and hospital surgeons. A new edition, with commentaries and a critical enquiry into the practice of surgery, by Chas. Bell. *Illus.* 4 v. 8°. *London,* 1826.

Bell, Robert. History of England, continued by. *See* **Mackintosh,** *Sir* J. **Lardner's cabinet cy lopædia, v. 3–12.**

——— A history of Russia. 3 v. 16°. *London,* 1839. **Lardner's cabinet cyclopædia, v. 52–54.**

——— Lives of British admirals. *See* **Southey,** R. **Lardner's cabinet cyclopædia, v. 70–74.**

——— Lives of British dramatists. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 96–97.**

——— Lives of the early writers of Great Britain. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 95.**

——— Lives of the most eminent literary and scientific men of Great Britain. English poets. 2 v. 16°. *London,* 1839. **Lardner's cabinet cyclopædia, v. 93–94.**

Bell, Wm. E. Carpentry made easy, or the art of framing on a new and improved system. roy. 8°. *Philadelphia,* 1858.

BELL, The. *See* **Gatty,** Alfred.

Bellew, Frank. The art of amusing; a collection of graceful arts, merry games, odd tricks, curious puzzles, etc. *Illus.* 12°. *New York and London,* 1866. 2 copies.

Belloc, Alexandre. Code de l'opérateur photographe. 12°. *Paris,* 1860.

——— Les quatre branches de la photographie; traité complet théorique et pratique des procédés de Daguerre, Talbot, Niepce de Saint-Victor, et Archer; précédé des annales de la photographie et suivi d'éléments de chimie et d'optique appliqués à cet art. 8°. *Paris,* 1855.

——— Photographie rationnelle, traité complet théorique et pratique. Applications diverses. Précédé de l'histoire de la photographie et suivi d'éléments de chimie appliquée à cet art. 8°. *Paris,* 1862.

Bellows, Albert J. How not to be sick; a sequel to "Philosophy of eating." 16°. *New York,* 1869.

——— The philosophy of eating. 8°. *New York,* 1867.

BELLS, An account of church. *See* **Lukis,** William C.

——— Die Glockengiesserei. *See* **Harzer, F. 214 Neuer Schauplatz der Künste.**

Bellusich, Johann von. Rittingers stetigwirkender Setzherd. 4°. *Wien,* 1859.

Beloe, Charles H. On the construction of catch-water reservoirs in mountain districts, for the supply of towns or other purposes. 8°. *London,* 1872.

Bement, C. N. The rabbit fancier; a treatise on the breeding, feeding and general management of rabbits, with remarks on their diseases and remedies. 12°. *New York,* 1855.

Bemrose, William. Manual of wood carving, with practical illustrations for learners of the art, and original and selected designs; introduction by Llewellynn Jewitt. 3d ed. *Illus.* 4°. *London and Oxford,* . . . pp. 34.

Bendel, A. Eisenbahnwesen in Nord-America. *See* **Henz.**

Benedikt, Moriz. Elektrotherapie; mit 12 in den Text gedruckten Holzschnitten. 8°. *Wien,* 1868.

Benet, S. V. Electro-ballistic machines, and the Schultz chronoscope. 4°. *New York and London,* 1866.

——— A treatise on military law and the practice of courts-martial. 8°. *New York,* 1862.

Benfey, Theodore. A Sanskrit-English dictionary; with etymologies and comparisons of cognate words, chiefly in Greek, Latin, Gothic, and Anglo-Saxon. 8°. *London,* 1866.

Benjamin, Asher. The architect, or practical house carpenter; with a glossary of architectural terms. *Illus.* 4°. *Boston,* 1853.

Bennett, J. Book of trades. *See* **Whittock,** N., and others.

Bennett, Jos. Fundamental ideas of mechanics; tr. by. *See* **Morin,** A. J.

——— Treatise on hydraulics; tr. by. *See* **Aubuisson de Voisins,** J. F. d'.

Bennett, Milo L. Law of railways; ed. by. *See* **Shelford,** L.

Digitized by Google

Bennett, R. Guide to wine makers, brewers and distillers, with tables arrangod to specific gravity for the hydrometer at 60 degrees of Fahrenheit; also a correction for the varying density caused by change of temperature. 18°. *Cincinnati*, 1852.

Benoit, Philippe Martial Narcisse. Guide du meunier et du constructeur de moulins. 2 parties et atlas. 8°. *Paris*, 1863.

—— and **Julia de Fontenelle,** Jean Sébastien Eugène. Manuel complet du boulanger, du négociant en grains, du meunier et du constructeur de moulins. 3e éd. *Illus.* 18°. *Paris*, 1836. Another ed., 1856. **34 Manuels Roret.**

Benoit Duportail, A. C. Die Construction und Fabrikation der Schraubenbolzen, Anker- und Laschenschrauben, Schraubenmuttern, Schraubenschlüssel, Unterlegscheiben, etc. *Illus.* 8°. *Weimar*, 1858. **240 Neuer Schauplatz der Künste.**

Bensa, L. G. The photographers' reference table for studio and field work, indicating with or without the angle tape, 1. The distance required between the camera and the subject; 2. The equivalent focus of a suitable lens; 3. The measure of the image on the focusing screen; 4. The angle measured by the included subject. *London*, . . . [Broadside.]

Bentall, E. H. Price list of agricultural implements and machines. 8°. *London*, 1850. pp. 64.

Bentham, *Sir* Samuel. Forming foundations under water. **Weale's papers on engineering, v. 6.**

—— Improvement of the Medway and the fort and arsenal of Chatham. **Weale's papers on engineering, v. 6.**

—— Improvement of Portsmouth harbor. **Weale's papers on engineering, v. 6.**

Benton, James G. A course of instruction in ordnance and gunnery. 8°. *New York*, 1861.

—— A course of instruction in ordnance and gunnery, for the use of cadets of the U. S. Military Academy. 8°. *New York*, 1867.

Berdmore, Thomas. A treatise on the disorders and deformities of the teeth and gums. *Illus.* 8°. *Baltimore*, 1844. pp. 84. **American library of dental science, v. 6.**

Berg, Otto. Anatomischer Atlas zur pharmazeutischen Waarenkunde, in Illustrationen auf fünfzig in Kreidemanier lithographierten Tafeln, nebst erläuterndem Texte. 4°. *Berlin*, 1865.

BERGAMO. Atti della esposizione Bergamasca, 1870 2 nos. 8°. *Bergamo*, 1871-72.

Bergasse, Alph. Recherches sur la consommation de la viande et du poisson à Rouen depuis 1800. 8°. *Rouen*, 1852.

Bergelin, J. Theod. Tidskrift för Svenska Landt-Bruket och dess Binäringar. 2 v. 8°. Andra Argången 1856. F. A. 1855. *Stockholm*, 1856.

Bergeron, L. E. Manuel du tourneur; précédé de notions élémentaires sur la connoissance des bois, la menuiserie, la forge, la trempe, la fonte des métaux et d'autres arts qui se lient avec celui du tour. T. 1-2 et atlas. 3 v. 4°. *Paris*, 1816.

Berghaus. Heinrich. Physical atlas, based on that of. *See* **Johnston, A. K.**

Bergmann. Düngerlehre. 2te Aufl. 8°. *Leipzig*, . . .

Bergmann, Franz Carl Adolf. Das Ganze der Stärke- und Puder-, sowie der damit vortheilhaft zu verbindenden Stärkegummi- und Stärkezuckerfabrication. *Illus.* 8°. *Weimar*, 1846. **39 Neuer Schauplatz der Künste.**

Bergmann, Leo. Das Ganze des Steindrucks. *See* **Pescheck,** H. E. **43 Neuer Schauplatz der Künste.**

—— Der praktische Mühlenbauer oder Zeugarbeiter. *Illus.* *Weimar*, 1846. **99 Neuer Schauplatz der Künste.**

Bericht über die 14. Versammlung deutscher Architecten und Ingenieure, abgehalten am 30., 31. August, 1., 2. Sept. 1864, zu Wien. 4°. *Wien*, 1865.

Berichte über die allgemeine Ausstellung zu Paris im Jahre 1867, erstattet von den für Preussen und die Norddeutschen Staaten ernannten Mitgliedern der internationalen Jury. 8°. *Berlin*, 1868.

Berjeau, J. Ph. The homœpathic treatment of syphilis, gonorrhœa, spermatorrhœa, and urinary diseases; rev. by J. H. P. Frost. 24°. *Philadelphia*, 1870.

Berkeley, M. J. Introduction to cryptogamic botany. *Illus.* 8°. *London*, 1857.

—— Outlines of British fungology, with characters of above 1000 species of fungi; a complete list of all that have been de-

Digitized by Google

Berkeley, M. J.—Continued.
scribed as natives of the British Isles. 8°. *London*, 1860.

BERLIN. Amtlicher Bericht über die allgemeine deutsche Gewerbe-Ausstellung zu Berlin im Jahre 1844. Th. 2 in 2 Abth. *Berlin*, 1845.

——— Architecten-Verein zu Berlin. Zusammenstellung der von 1848 bis 1871 gegebenen Aufgaben. 8°. *Aachen*, 1871.

——— Berliner entomologische Zeitschrift. Hrsg. von dem entomologischen Vereine in Berlin. 8°. *Berlin*, 1861.

——— Berliner Kunst-Ausstellung von 1852. *See* **Schasler,** M.

——— Der Boden und die landwirthschaftlichen Verhältnisse des preussischen Staates, nach dem Gebietsumfange von 1866. Dargestellt von August Meitzen. 4 B. 4°. *Berlin*, 1868–69.

——— Centralverein für das Wohl der arbeitenden Klassen. Mittheilungen. 3 B. Jahrg. 1, 1848–49. Jahrg. 3, 1851–52. N. F., Jahrg. 1, 1853–55. 8°. *Berlin*, 1849–55.

——— Landwirthschaftliche Zeitung für Nord- und Mitteldeutschland. B. 1–4. 4°. *Berlin*, 1858–63.

——— Physikalische Gesellschaft. Fortschritte der Physik. 8°. *Berlin*, 1861.

——— Polytechnischen Gesellschaft, Bericht über die Verhältnisse und die Wirksamkeit der. Berichte 1–7. 1839–51. 1 B. 4°. *Berlin*, 1845–51.

——— ——— Verhandlungen der. Von G. Michaelis. 8°. *Berlin*, 1856.

——— Reinigung und Entwässerung Berlins. *See* **Virchow,** Rudolf.

——— Reinigung und Entwässerung der Stadt Berlin. *See* **Wiede,** E.

——— Uebersicht der Auszeichnungen, welche in Folge der Gewerbe-Ausstellung zu Berlin im Jahre 1844 ertheilt worden sind. Aus der Allg. Preuss. Zeitung vom 21. Februar 1845. 8°. *Berlin*, 1845.

——— Verein für Eisenbahnkunde. Verhandlungen. 8°. *Berlin*, 1853.

——— Verein zur Beförderung des Gewerbfleisses in Preussen. Verhandlungen. 4°. *Berlin*, 1822.

——— Verein zur Beförderung des Gartenbaues in den königl. Preussischen Staaten. Wochenschrift. Jahrg. 3–11, 1860–68. 8 B. 4°. *Berlin*, 1860–68.

——— Verzeichniss der im Gewerbehause aufgestellten königlichen Bibliothek

BERLIN—Continued.
Berlin im Januar 1843. 4°. *Berlin*, 1843.

——— Zeitschrift der deutschen geologischen Gesellschaft. B. 7. 8°. *Berlin*, 1855.

——— Zeitschrift des Vereins deutscher Ingenieure. B. 1. Jahrg. 1857. Von F. Grashof. 4°. *Berlin*, 1857.

——— Zeitschrift für Acclimatisation. Organ des Acclimatisations-Vereins für die königlich Preussischen Staaten, hrsg. von E. Kaufmann. 10 B. 8°. *Berlin und Paris*, 1858–67.

——— Zeitschrift für die gesammten Naturwissenschaften, hrsg. von dem naturw. Vereine für Sachsen und Thüringen, in Halle. Redigirt von C. Giebel und W. Heintz. 1ste Serie. B. 4. *Imperfect.* 8°. *Berlin*, 1854.

Berlyn, Peter, and **Fowler,** Chas., *jr.* The Crystal palace; its architectural history and constructive marvels. 8°. *London*, 1851.

BERNE. Bernische Blätter für Landwirthschaft, Wald- und Gartenbau. Herausgegeben von der Ökonomischen Gesellschaft des Kantons Berns. 5 B., 8°, 1856–60. 3 B., 4°, 1861–65. *Bern*, 1856–65.

——— Mittheilungen der naturforschenden Gesellschaft in Bern. 18 B. 8°. *Bern*, 1856–74.

Bernan, Walter. On the history and art of warming and ventilating rooms and buildings, with notices of the progress of personal and fireside comfort, and of the management of fuel. 2 v. *Illus.* 8°. *London*, 1814.

Bernard, Auguste Jos. De l'origine et des débuts de l'imprimerie en Europe. Pt. 1–2. 8°. *Paris*, 1853.

Bernard, Claude. Notes of Bernard's lectures on the blood, with an appendix by Walter F. Atlee. 12°. *Philadelphia*, 1854.

Bernhardi, A. Die Luftcirculationsheizung. 8°. *Eilenberg*, 1864. pp. 28.

Bernier, *aîné*, and **Arbey,** Ferdinand. Description des machines-outils propres à travailler le bois, et d'outils à la main destinés au même usage. 4°. *Paris*, 1862. pp. 32.

Bernoulli, Christoph. Handbuch der Technologie, oder rationelle Darstellung der technischen Gewerbe, nach den neu-

Digitized by Google

Bernoulli, Christoph—Continued.
esten Ansichten und Erfindungen. *Illus.* B. 1-2. 8°. *Basel*, 1840.

Bernoulli, Daniel. Hydrodynamica sive de viribus et motibus fluidorum commentarii; opus academicum ab autore, dum Petropoli ageret congestum. 4°. *Argentorati*, 1738.

Bernt, Josephus. Experimentorum docimasiam pulmonum hydrostaticam illustrantium centuria. 4°. *Viennæ*, 1823.

Béron, Pierre. Le fluide électrique ramené comme les gaz, aux calculs stœchiométriques et aux lois aérostatiques, électrostatiques, contenant l'explication des faits électriques et électro-chimiques de toutes les sciences, suivie d'un appendice sur la cause physique des maladies, de leur germe et des propriétés dynamiques des médicaments. 8°. *Paris*, 1861.

——— Photographie, chromatographie, photo-chimie. 8°. *Paris*, 1862.

Berthelot, Pierre Marcellin. Chimie organique fondée sur la synthèse. T. 1-2. 8°. *Paris*, 1860.

Berthier, Pierre. Traité des essais par la voie sèche; ou des propriétés, de la composition et de l'essai des substances métalliques et des combustibles. T. 1-2. 8°. *Paris*, 1848. pp. 49.

Berthollet, C. L. and A. B. Elements of the art of dyeing, with a description of the art of bleaching by oxymuriatic acid. 2 v. Transl. from French by Andrew Ure. 8°. *London*, 1824. Same. New ed. *Illus.* *London*, 1841.

Bertram, Jas. G. The harvest of the sea; a contribution to the natural and economic history of British food fishes. 8°. *New York*, 1866.

Bertrand, Jean Élie. Descriptions des arts et métiers approuvés par l'académie. *See* PARIS.

Bertsch, A. Photographie sur verre; notice sur l'emploi du collodion rapide. 8°. *Paris*, 1852. pp. 31.

Berzelius, Jacob. Fortschritte der physischen Wissenschaften. *See* **Jahresbericht.**

Berzelius, Johann Jakob. Lehrbuch der Chemie. Aus der schwedischen Handschrift des Verfassers übersetzt von F. Wehler. 10 B. (1 v. plates.) 8°. *Dresden und Leipzig*, 1833-41.

——— Rapport annuel sur les progrès de la chimie, 1845-6. Traduit du suédois par Philippe Plantamour. 6e-7e année. 8°. *Paris*, 1846-47.

Berzelius, Johann Jakob—Continued.

——— Traité de chimie minérale, végétale et animale. 2e éd. française, traduite par Esslinger et Hoefer sur la cinquième édition que publie M. B., à Dresde et à Leipzig. 6 v. 8°. *Paris*, 1845-50.

——— The use of the blow-pipe in chemical analysis, and in the examination of minerals; transl. from French of M. Fresnel, by J. G. Children. 8°. *London*, 1822.

Besant, W. H. A treatise on hydrostatics and hydrodynamics. 8°. *Cambridge*, 1859.

Beschke, William. America and Europe; wood and iron sail ships and steamers. 8°. *Washington*, 1858. pp. 7.

Beste Art (Die) der Vertilgung der Feldmäuse. Eine vom General-Comité des landwirthschaftlichen Vereins in Bayern gekrönte Preisschrift. 16°. *München*, 1859. pp. 83.

Beta, H. Die Stadt-Gifte, und deren Umwandlung in neue Geld- und Lebens-Quellen, unter Leitung eines deutschen Gesundheits-Parlamentes. 8°. *Berlin*, 1870. pp. 48.

Bétancourt, —. La composition des machines. *See* **Lanz.**

——— Essay on the construction of machines. *See* **Lanz.**

BÉTON aggloméré. *See* **Gilmore,** Q. A.

——— Coignet. A description of the material and its uses in France and America, with reports of distinguished engineers and architects; pub. by J. E. Goodrich, jr., New York, and L. J. Coignet Stone Co. 4°. *New York*, 1874.

——— Coignet and asphalt. *See* UNITED STATES. **Reports** of commissioners to Paris.

Betton, Thomas R. Elements of chemistry. *See* **Reynault,** H. v.

Beudant, F. S. Cours élémentaire d'histoire naturelle. Minéralogie—géologie. 12°. *Paris*, 1840.

Beumenberger, Joh. Gottlieb. Der vollkommene Juwelier. Mit Benutzung englischer Quellen. *Illus.* 8°. *Ilmenau*, 1828. **32 Neuer Schauplatz der Künste.**

Bevan, Edward. The honey-bee; its natural history, physiology, and management. 12°. *London*, 1838.

Digitized by Google

Beyern, Johann Matthias. Theatrum machinarum molarium, oder Schauplatz der Mühlen-Bau-Kunst, etc. Ingleichen auch von Wind-, Hand-, Ross- und Feld-Mühlen; der neundte Theil, von Jacob Leupolds. fol. *Dresden*, 1767.

Bezold, A. Kunst- und Gewerbe-Blatt. *See* MUNICH.

Bezon. Dictionnaire général des tissus anciens et modernes, avec l'explication abrégée des moyens de fabrication et l'entente des matières, etc. T. 1-2. 8°. *Lyon*, 1856-57.

Biber. Dictionnaire des langues française et allemande par Biber et autres. *See* **Moxin,** D. J.

Biblical atlas, and scripture gazetteer, with descriptive notices of the tabernacle and the temple. roy. 8°. *Philadelphia*, 1855.

BIBLICAL literature, Cyclopædia of. *See* **McClintock,** John.

Bibliographie de la France, ou journal général de la librairie. 1re série, T. 40-45, 1850-56. 2e série, T. 1-20, 1857-76. *Paris*, 1850-76——.

BIBLIOGRAPHY. Allgemeines Bücher-Lexikon. *See* **Heinsius,** J. W.

——— Bibliographer's manual of English literature. *See* **Lowndes,** W. T.

——— Bibliotheca bibliographica. *See* **Petzholdt,** Julius.

——— Bibliotheca mechanico-technologica. *See* **Engelmann,** W.

——— Bibliotheca medico-chirurgica et anatomico-physiologica. *See* **Engelmann,** W.

——— Bibliotheca œconomica. *See* **Engelmann,** W.

——— Bibliotheca photographica. *See* **Zuchold,** E. A.

——— Book buyer's manual. *See* Putnam, G. P.

——— British catalogue. *See* **Low,** S.

——— Catalogue annuel de la librairie française. *See* **Reinwald,** C.

——— Catalogue de la bibliothèque de la chambre des représentants *See* BELGIUM.

——— Catalogue de livres français, etc. *See* **Bossange,** H.

——— Catalogue des ouvrages anglais et américains de la bibliothèque de l'école impériale des ponts et chaussées. *See* PARIS.

BIBLIOGRAPHY. Catalogue of American publications. *See* Roorbach, O. A.

——— Catalogue of the Astor library. *See* NEW YORK.

——— Catalogue of books. *See* Bohn, H. G.

——— Catalogue of books. *See* Quaritch, B.

——— Catalogue of books belonging to the Library co. of Philadelphia. *See* PHILADELPHIA.

——— Catalogue of books selected in London, Paris and Leipsic. *See* Little, Brown & co.

——— Catalogue of the Calcutta public library. *See* CALCUTTA.

——— Catalogue of the Free library. *See* MANCHESTER.

——— Catalogue of the library of Brown University. *See* PROVIDENCE, R. I.

——— Catalogue of the library of Columbia college. School of mines. *See* NEW YORK (city).

——— Catalogue of the library of congress. *See* UNITED STATES.

——— Catalogue of the library of the Great Seal Patent Office. *See* GREAT BRITAIN. **Great** seal patent office.

——— Catalogue of the library of the Royal society. *See* LONDON.

——— Catalogue of the Loganian library. *See* PHILADELPHIA.

——— Catalogue of Marietta library. *See* MARIETTA, O.

——— Catalogue of the Melbourne public library for 1861. *See* MELBOURNE.

——— Catalogue of the Mercantile library. *See* BALTIMORE.

——— Catalogue of my English library. *See* **Stevens,** H.

——— Catalogue of the New York State library. *See* NEW YORK.

——— Catalogue of publications of the Smithsonian Institution. **Smithsonian miscellaneous collections, v. 7.**

——— Catalogue of publications of societies in the Smithsonian Institution. **Smithsonian miscellaneous contributions, v. 3.**

——— Catalogue of the Richmond library. *See* RICHMOND, Va.

——— Catalogue of the scientific books in the library of the Royal society. *See* LONDON.

——— Catalogue of the Tennessee state library. *See* TENNESSEE.

Digitized by Google

BIBLIOGRAPHY. Classified index to the London catalogue. *See* LONDON.

——— Codices mss. bibliothecæ regiæ Monacensis: Gallici, etc. *See* MUNICH.

——— Dictionary of English literature. *See* **Allibone**, S. A.

——— English catalogue of books, 1835 to 1863. *See* **Low**, S.

——— Fünfjähriger Bücher-Catalog. *See* **Hinrichs**, J. C.

——— Guide to American literature. *See* **Trübner**, N.

——— Index to the catalogue of the public library. *See* BOSTON.

——— Index of books in the upper hall of the public library. *See* BOSTON.

——— Journal de l'imprimerie. *See* **Journal**.

——— Katalog der Bibliothek der technischen Bildungsanstalt zu Dresden. *See* DRESDEN.

——— Laying the corner stone of the library edifice of the free public library, New Bedford. *See* NEW BEDFORD.

——— The librarian's manual. *See* **Guild**, R. A.

——— Library manual. *See* Appleton, D., & co.

——— List of the books of reference in the reading-room of the British museum. *See* LONDON.

——— Literatur des Bau- und Ingenieur-Wesens. *See* **Malberg**, A.

——— Literatur der Gewerbskunde. *See* **Krieger**, J. C.

——— London catalogue of books. *See* LONDON.

——— Manual of architectural bibliography. *See* **Stuart**, R. **Dictionary** of architecture.

——— Manuel du libraire. *See* **Brunet**, J. C.

——— Norton's literary register for 1856. *See* **Norton**, C. B.

——— of the natural history of the rattlesnake, by S. W. Mitchell. **Smiths'n contrib., v. 12.**

——— of North American conchology, by W. G. Binney. **Smithsonian miscellaneous collections, v. 7.**

——— Publications of learned societies and periodicals. **Smiths'n contrib., v. 7–8.**

——— Publishers' circular of British and foreign literature. *See* **Publisher's circular.**

BIBLIOGRAPHY. Report of the directors of the mercantile library association, St. Louis, 1856. *See* ST. LOUIS.

——— Report of the directors of the Providence Athenæum, 1858. *See* PROVIDENCE, R. I.

——— Report of directors of the Young men's mercantile library association, Cincinnati. *See* CINCINNATI.

——— Report of the Marylebone free library, 1854. *See* LONDON.

——— Report of the Mercantile library association. *See* NEW YORK.

——— Report of the Mercantile library association. *See* SAN FRANCISCO.

——— Report of Salford borough royal museum and library. *See* SALFORD.

——— Report of the trustees of the Free public library. *See* NEW BEDFORD.

——— Report of the trustees of the New York state library. *See* NEW YORK.

——— Report of the trustees of the public library of Boston. *See* BOSTON.

——— Report of the Young men's library association, Worcester, Mass. *See* WORCESTER.

——— Sach-Catalog der Bibliothek des landwirthschaftlichen Vereins in Bayern. *See* MUNICH.

——— Verzeichniss der Bibliothek der k. k. Landwirthschafts-Gesellschaft in Wien. *See* VIENNA.

——— Verzeichniss der Bibliothek des schweizerischen Polytechnikums. *See* ZÜRICH.

——— Verzeichniss der Bücher, etc. *See* Hinrichs, J. C.

——— Verzeichniss der im Gewerbehause aufgestellten königlichen Bibliothek. *See* BERLIN.

——— Verzeichniss neuer Bücher. *See* Thun, J. P.

Bibliothèque physico-économique, instructive et amusante, ou recueil périodique de tout ce que l'agriculture, les sciences et les arts qui s'y rapportent, offrent de plus intéressant; par une société de savans et de propriétaires. T. 19e et 20e. T. 1r et 2e, 2e série. 12°. *Paris*, 1826–27.

Bickmore, Albert S. Travels in the East Indian archipelago. 8°. *New York*, 1869.

Bidder, George Parker, *jr.* The national defences. 8°. *London*, 1861.

Digitized by Google

Biddle, John B. Materia medica, for the use of students. 3d ed. 8°. *Philadelphia,* 1868.

Biddlecombe, George. Art of rigging; ed. by. *See* **Art.**

Bidwell, George H. Treatise on the imposition of forms. 18°. *New York,* 1865.

Bienenzeitung, Die. Das Organ des Vereins der deutschen Bienenwirthe, etc. B. 1–8. 8°. *Nördlingen,* 1861–68.

Bigelow, Jacob. American medical botany, etc. *Illus.* 8°. *Boston,* 1817.

——— Brief expositions of rational medicine. 16°. *Boston,* 1858.

——— Elements of technology, etc. 2d ed. 8°. *Boston,* 1831.

——— Florula Bostoniensis; a collection of plants of Boston and its environs. 8°. *Boston,* 1814.

——— Nature in disease. 12°. *Boston,* 1854.

——— Remarks on classical and utilitarian studies. 8°. *Boston,* 1869. pp. 57.

——— The useful arts, considered in connexion with the applications of science. 2 v. 12°. *New York,* 1847.

Bigg, Henry Heather. On the mechanical appliances necessary for the treatment of deformities. Pt. 1. The lower limbs. 12°. *London,* 1858.

Bigot de Moroques, Pierre Marie Sébastien. L'influence de la latitude sur la vigne, etc. *See* **Thiébaut de Berneaud,** A.

Billing, Sidney, and **Prince,** Alexander. The law and practice of patents and registration of designs, etc. 8°. *London,* 1845.

BILLS of exchange, etc. *See* **Chitty,** Joseph.

——— of merchandise: average time. *See* **Brooks,** L.

Bingham, Jacob. A practical essay on the plough. 8°. *Toronto,* 1856. pp. 25.

Bingham, Robert J. Photogenic manipulation; containing the theory and plain instructions in the art of photography. Pts. 1-2. *Illus.* 16°. *London,* 1853.

Bingley, Wm. Animal biography; or, authentic anecdotes of the lives, manners and economy of the animal creation, arranged according to the system of Linnæus. 3 v. 3d ed. *London,* 1805.

——— Useful knowledge, or a familiar account of the various productions of nature, etc. 3 v. 16°. *London,* 1818.

Binns, R. W. A century of potting in the city of Worcester; being the history of the royal porcelain works from 1751 to 1851, to which is added a short account of the Celtic, Roman, and mediæval pottery of Worcestershire. *Illus.* 8°. *London, Worcester,* 1865.

Binney, Wm. G. Bibliography of North American conchology. **Smithsonian miscellaneous collections, v. 7.**

BIOGRAPHICAL dictionary. *See* **Rose,** Hugh James.

——— ——— A brief. *See* **Hole,** Charles.

——— history of the fine arts. *See* **Spooner,** S.

——— sketches of New York physicians. *See* **Francis,** Samuel W.

BIOGRAPHY, American. *See* **Sparks,** Jared.

——— and mythology. A dictionary of. *See* **Thomas,** J.

——— and mythology. A dictionary of Greek and Roman. *See* **Smith,** William.

——— Brazilian biographical annual, 1876 *See* **Macedo,** Joaquim Manuel de.

——— Cyclopædia of. *See* **Appleton's.**

——— Cyclopædia of. *See* **Godwin,** Parke.

——— Dictionary of. *See* **Cates,** William L. R.

——— Dictionary of congress. *See* **Lanman,** Charles.

——— Erinnerung an Mitglieder der mathematisch-physikalischen Classe der Akademie der Wissenschaften. *See* **Martins,** C. F. P. von.

——— General. *See* **Aiken,** John and W. Enfield.

——— Industrial. *See* **Smiles,** Samuel.

——— Life of Sir M. I. Brunel. *See* **Beamish,** R.

——— Life of R. Stephenson. *See* **Jeaffreson,** J. C., and **Pole,** N.

——— Life of T. Telford. *See* **Telford,** T.

——— Lives of engineers. *See* **Smiles,** S.

——— Lives of foreign statesmen. *See* **James,** G. P. R., and **Crowe,** E. E.

——— Lives of the principal architects. *See* **Nicholson,** P. **Architects** and engineers' dictionary.

——— Manual of scientific. *See* **Poggendorff.**

——— Memoirs of American governors. *See* **Moore,** J. B.

——— Memoirs of eminent mechanics. *See* **Howe,** H.

Digitized by Google

BIOGRAPHY. Memoirs of the presidents. *See* **Williams,** E. **Addresses** and messages of the presidents.

——— Memoirs of the presidents of the Royal society. *See* **Weld,** C. R. **History** of the Royal society.

——— Notices biographiques. *See* **Arago,** François.

——— Nouvelle biographie générale, depuis les temps les plus reculés jusqu'à nos jours. *See* **Hoefer.**

——— of distinguished scientific men. *See* **Arago,** D. F. J.

——— of printers. *See* **Thomas,** I. **History** of printing.

——— Sketches of distinguished mechanics. *See* **Connell,** J.

BIOLOGY, The principles of. *See* **Spencer,** Herbert.

Bion, Nicolas. The construction and principal uses of mathematical instruments. Transl. from the French. Additions by E. Stone. *Illus.* fol. *London,* 1723.

Biot, Edmond. Manuel du constructeur de chemins de fer. *Illus.* 18°. *Paris,* 1834. **84 Manuels Roret.**

——— Ueber die Anlegung und Ausführung aller Arten von Eisenbahnen. Transl. by C. H. Schmidt. 8°. *Weimar und Ilmenau,* 1835. **76 Neuer Schauplatz der Künste.**

Biot, Jean Baptiste, Zum Gedächtniss an. *See* **Martins,** C. F. P. von.

Birago. Recherches sur les équipages de ponts militaires en Europe, etc. Traduit par J. T. *Illus.* 8°. *Paris,* 1845.

Birch, Samuel. History of ancient pottery. *Illus.* 2 v. 8°. *London,* 1858.

Bird, Golding, and **Brooke,** Charles. The elements of natural philosophy, etc. 8°. *London,* 1860.

BIRD-SHOOTING. Der Vogelschiitz. *See* **Hedinger,** A.

BIRDS, Architecture of. *See* **Architecture.**

——— Catalogue of North American. By S. F. Baird. **Smiths'n misc. collections, v. 2.**

——— Flight of. *See* **Davidson** R. O.

——— Instructions for collecting nests and eggs. **Smiths'n misc. coll., v. 2.**

——— Natural history and classification of. *See* **Swainson,** W. **Lardner's cabinet cyclopædia, v. 115-116.**

——— of the globe. **Science lectures for the people, series 7.**

BIRDS of the Northwest. Reports of the U. S. survey of the territories. *See* **Hayden,** F. V.

Biringuccio, Vanoccio. La pyrotechnie; ou l'art du feu. Traduite en françois par Jacques Vincent. 10 v. 8°. *Rouen,* 1627.

——— Traité de la fabrication des bouches à feu de bronze au 16e siècle en Italie. *Illus.* 8°. *Paris,* 1856.

Birkenhead iron-clads. Correspondence between her majesty's government and Messrs. Laird Brothers. 8°. *London,* 1864. pp. 69.

Birkmyre, William. Catalogue of the Victorian exhibition, 1861. *See* **Archer,** W. H.

Birlinger, Anton. Schwäbisch-Augsburgisches Wörterbuch. 8°. *München,* 1864.

BIRMINGHAM. Institution of mechanical engineers. Proceedings, 1850-76. 26 v. 8°. *Birmingham,* 1851-77.

——— Journal of the British photographic society. *See* **Photographic** notes.

Birt, William Radcliff. Atmospheric waves. *See* **Herschel,** *Sir* J. F. W. **Manual** of scientific enquiry.

——— Handbook of the law of storms, etc. 8°. *Liverpool,* 1853.

BIRTHS. Des naissances dans la ville de Bruxelles, considérées dans leur rapport avec la populations. *See* **Heuschling,** X.

Bischoff, Carl. Die practischen Arbeiten im chemischen Laboratorium. *Illus.* 8°. *Berlin,* 1862.

——— Das Kupfer und seine Legirungen, etc. 8°. *Berlin,* 1865.

Bischoff, Karl Gustav. Elements of chemical and physical geology. Transl. by B. H. Paul and J. Drummond. Printed for the Cavendish society. 2 v. 8°. *London,* 1854-59.

Bischoff, Theodor Ludwig Wilhelm. Gedächtnissrede auf Friedrich Tiedemann, etc. 4°. *München,* 1861. pp. 41.

——— Ueber Johannes Müller und sein Verhältniss zum jetzigen Standpunkt der Physiologie, etc. 4°. *München,* 1858. pp. 27.

Bishop, Frederick. The illustrated London cookery book. 8°. *London,* 1852.

Bishop, J. Leander. A history of American manufactures, from 1608 to 1860. 3 v. 8°. *Philadelphia,* 1861. 3d ed., 1868.

Bishop, James, and others. Handbook of plain instructions for the construction

Digitized by Google

Bishop, James, and others—Continued. and management of fresh water aquaria for gold fish. 16°. *London*, 1858. pp. 60.

Bishop, John, of Cheltenham. Treatise on the violin; transl. by. *See* **Otto,** J. A.

Biston, Valentin. Brunneumeister. *See* **Janvier. 45 Neuer Schauplatz der Künste.**

——— Manuel du charpentier. *See* **Hanns,** P. A. **76 Manuels Roret.**

——— Manuel de mécanicien fontainier, etc. *See* **Janvier. 93 Manuels Roret.**

——— Manuel théorique et pratique du chaufournier. 18°. *Paris*, 1836. **50 Manuels Roret.**

Bito, Works of. *See* **Veterum** mathematicorum.

BITUMEN. Its varieties, properties, and uses, by H. W. Halleck. *See* UNITED STATES. Papers on engineering.

Bixio, Jacques Alexander. Journal d'agriculture, fondé par. *See* **Journal.**

——— Maison rustique: sous la direction de. *See* **Maison.**

Blachette and **Zoéga.** Manuel du fabricant et du raffineur de sucre de cannes, de betteraves, d'érable, de raisin, de fécule, de châtaigne, etc. 18°. *Paris*, 1833. 2 *copies.* **80 Manuels Roret.**

Black, William. A practical treatise on brewing and storing beer. 8°. *London*, 1835.

——— A practical treatise on brewing, based on chemical and economical principles. 8°. *London*, 1840.

BLACKBOARD, Exercises on the. *See* **Goldsbury,** John.

Blackburne, E. L. Sketches, graphic and descriptive, etc., for a history of the decorative painting applied to English architecture during the middle ages. fol. *London*, 1848.

Blackett, T. Oswald. An essay on the use of the spirit level, as applied to engineering and other purposes. 8°. *Newcastle-upon-Tyne*, 1838.

BLACKSMITHING. Der Grobschmied. *See* **Harzer,** F. **169 Neuer Schauplatz der Künste.**

Blaine, Delabere P. An encyclopædia of rural sports, etc. 8°. *London*, 1852.

Blair, John. Blair's chronological tables, revised and enlarged; from the earliest times to the Russian treaty of peace, April, 1856. 8°. *London*, 1856.

Blake, Alexander V. The American bookseller's complete reference trade list and alphabetical catalogue of books published in this country. 4°. *Claremont, N. H.*, 1847.

Blake, John Lauris. The family encyclopædia of useful knowledge and general literature. *Illus.* 8°. *Philadelphia*, 1849.

——— A general biographical dictionary. roy. 8°. *Philadelphia*, 1840.

Blake, Robert. An essay on the structure and formation of the teeth in man and various animals, rev. by C. O. Cone. 8°. *Baltimore*, 1848. **American library of dental science, v. 9.**

Blake, William P. Ceramic art, a report on pottery, porcelain, tiles, terra-cotta and brick, etc., at the international exhibition, Vienna, 1873. 8°. *New York*, 1875.

——— The production of the precious metals. 8°. *New York*, 1869.

Blakey, W. Art de faire les ressorts de montres. PARIS. **Acad. des sc., arts et métiers, v. 43.**

Blanc, Charles. The grammar of painting and engraving. Transl. from French by Kate N. Doggett. sm. 4°. *New York*, 1874.

Blanc, Étienne. L'inventeur breveté. Code des inventions et des perfectionnements. 8°. *Paris*, 1852.

——— Traité de la contrefaçon en tous genres et de sa poursuite en justice. 4e éd. 8°. *Paris*, 1855.

——— and **Beaume,** Alexandre. Code général de la propriété industrielle, littéraire et artistique. 8°. *Paris*, 1854.

——— ——— Code général de la propriété industrielle, littéraire et artistique, comprenant les législations de tous les pays et les traités internationaux sur les inventions brevetées, etc. 8°. *Paris*, 1854.

Blanchard, E. Manuel du coloriste; rev. par. *See* **Perrot,** A. M. **95 Manuels Roret.**

Blanckley, Thomas Riley. A naval expositor; together with the titles of all the inferior officers belonging to a ship, with an abridgment of their duties. 4°. *London*, 1750.

Blancourt, H. The art of glass; shewing how to make all sorts of glass, crystal and enamel; likewise the making of pearls, precious stones, china and looking-glasses. 8°. *London*, 1699.

Digitized by Google

Bland, M. Algebraical problems, producing simple and quadratic equations, with their solutions. 8°. *Cambridge,* 1812.

Bland, William. Hints on the principles which should regulate the form of ships and boats. *Illus.* 12°. *London,* 1852. **Weale's series, No. 83.**

Blandin, Ph. Fr. Anatomy of the dental system, human and comparative. Transl. from French by R. Arthur. 8°. *Baltimore,* 1845. **American library of dental science, v. 7.**

Blandy, Alfred A. *See* **American** journal of dental science.

Blanquart-Evrard. Prospectus of the establishment for photographic printing. *See* Sutton, T.

—— Traité de photographie sur papier, avec une introduction par M. Georges Ville. 8°. *Paris,* 1851.

Blanqui, Jérôme Adolphe. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

—— Dictionnaire de l'industrie manufacturière, par. *See* **Baudrimont,** A. E., and others.

—— Lettres sur l'exposition universelle de Londres. 12°. *Paris,* 1851.

Blaserna, Pietro. The theory of sound in its relation to music. *Illus.* 12°. *New York,* 1876. **International scientific series, v. 22.**

Blasius, Ernst. Akiurgische Abbildungen oder Darstellung der blutigen chirurgischen Operationen und der für dieselben erfundenen Werkzeuge. *Illus.* fol. Text, 8°. *Berlin,* 1844.

Blasius, William. Storms: their nature, classification and laws; with the means of predicting them, by their embodiments, the clouds. 8°. *Philadelphia,* 1875.

BLAST-furnace phenomena, Studies of. *See* **Gruner,** M. L.

BLAST-furnaces. Die Hochofen-Dimensionen, auf Grundlage des Hochofen-Prozesses. *See* **Troska,** Richard.

—— Wärmeverhältnisse des Eisenhochofenprozesses. *See* **Akerman,** Richard.

BLASTING masonry. Mauerwerks-Sprengungen mit Dynamit und Pulver. *See* **Lauer,** Johann.

—— Treatise on blasting stone. *See* **Burgoyne,** J.

BLEACHING. Abridgments English Patents, No. 14.

—— The art of. *See* **Des Charmes,** Pajot.

BLEACHING, Chemistry of. *See* **O'Neil,** C.

—— Manuel du blanchiment. *See* **Julia de Fontenelle,** J. S. E. **40 Manuels Roret.**

—— Notice sur le blanchissage. *See* **Rouget de Lisle.**

BLECHINGLY tunnel, Practical tunneling, exemplified by. *See* **Simms,** F. W.

Bledsoe, Albert Taylor. The philosophy of mathematics, etc. 12°. *Philadelphia,* 1868.

Bleeker, P. Tijdschrift voor Indische taal-, land- en volkenkunde. *See* BATAVIA.

Blinn Jesse, McCormick et al. vs. Talcott et al. Appeal. *See* McCormick, C. H.

Blinn, Leroy J. A practical workshop companion, for tin, sheet iron, and copper plate workers. 12°. *Philadelphia,* 1872.

Bliss, George, *jr.* Annual of scientific discovery; v. 1–2; ed. by. *See* **Wells,** D. A.

Blochmann, G. M. S. Beiträge zur Geschichte der Gasbeleuchtung. 8°. *Dresden,* 1871.

BLOCK cutting. Die Formschneidekunst. *See* **Schmidt,** C. H. **173 Neuer Schauplatz der Künste.**

Blodget, Lorin. Climatology of the United States, and of the temperate latitudes of the North American continent. 8°. *Philadelphia and London,* 1857.

—— 26th annual report of the Philadelphia board of trade. 8°. *Philadelphia,* 1859.

Bloede, Victor G. The reducer's manual, and gold and silver worker's guide. 12°. *New York and London,* 1867.

BLOOD, Lectures on the. *See* **Bernard,** M. Claude.

—— and blood-vessels. Statical essays. *See* **Hales,** Stephen.

BLOSSOM rock, Removal of, in San Francisco harbor, Cal. *See* UNITED STATES. **Department** of war. Bureau of engineering.

Blot, Pierre. What to eat, and how to cook it. 12°. *New York,* 1863.

BLOWPIPE analysis. Die Löthrohranalyse. *See* **Landauer,** J.

—— character of minerals. *See* **Smith,** A.

—— Die Löthrohr-Chemie. *See* **Simler,** R. Theodor.

—— On the use of. *See* **Berzelius,** J. J.

—— On the use of. *See* **Griffin,** John.

—— On the use of. *See* **Plattner,** Karl Friedrich.

—— Die Probirkunst mit dem Löthrohre. *See* **Plattner,** Karl Friedrich.

—— A system of instruction in the practical use of the. *See* **System.**

Digitized by Google

BLOWPIPE, A system of instruction in the use of the. See **Plympton**, G. W.

Bloxam, Charles Loudon. Chemistry, inorganic and organic. 8°. *London*, 1867.

Bloxam, Matthew Holbeche. The principles of Gothic ecclesiastical architecture. *Illus.* 12°. *London*, 1846.

BLUE BOOK. By J. Disturnell. *See* **United States Register.**

Blum, Wilhelm. Natürliche und künstliche Mineralwasser. 8°. *Braunschweig*, 1853.

Blundevil, —. His exercises, containing eight treatises: cosmography, globes, mathematical instruments, etc. sm. 4°. *London*, 1636.

Blunt, Edmund M. The American coast pilot, etc. 21st ed. 8°. *New York*, 1867.

Blunt, George W. Young sea officer's sheet anchor; ed by. *See* **Lever**, D.

Blunt, Joseph. The shipmaster's assistant and commercial digest. 8°. *New York*, 1848; also 5th ed., 1851; 9th ed., 1857.

Blüthner, Julius, and **Gretchel**, Heinrich. Lehrbuch des Pianofortebaues, in seiner Geschichte, Theorie und Technik. Mit einem Atlas. 8° and 4°. *Weimar*, 1872.

BOAT armament, System of. *See* **Dahlgren**, J. A.

——— exercise at the Naval academy, Manual of. *See* **Manual.**

——— The sailing. *See* **Folkard**, H. C.

Bobierre, Adolphe. Traité de manipulations chimiques, etc. *Illus.* 8°. *Paris*, 1844.

Bode, Friedrich. Beiträge zur Theorie und Praxis der Schwefelsäure-Fabrikation. 8°. *Berlin*, 1872.

Bodmer, R. Resistance to the blades of screw propellers. *See* **Tredgold**, T. **Steam** engine. 2d series, v. 3.

Boeckh, Augustus. Public economy of the Athenians. Transl. from German by Anthony Lamb. 8°. *Boston*, 1857.

Böcklern, Georg Andreas. Theatrum machinarum novum; das ist neu-vermehrter Schauplatz der mechanischen Künsten von Mühl- und Wasserwercke. fol. *Nuernberg*, 1673.

Boerhaave, H. A new method of chemistry, including the theory and practice of that art. Transl. by P. Shaw and E. Chambers. 2 v. 4°. *London*, 1727–41.

BOHEMIA. Landwirthschaftlichen Industrie Böhmens, Statistik der. *See* **Schnabel**, G. N.

Böhmert, Victor. Die Erfindungspatente, mit besonderer Rücksicht auf England und die Schweiz. 8°. *Berlin*, 1869.

Bohn, Henry G. Bibliographer's manual of English literature; ed. by. *See* **Lowndes**, W. T.

——— A catalogue of books. 8°. *London*, 1841.

BOILERS, Explosion of steamboat. *See* UNITED STATES.

——— The horizontal fire-tube and the vertical water-tube. *See* UNITED STATES.

——— Marine. *See* **Bartol**, B. H.

——— Marine, by J. Dinnen. *See* **Tredgold**, T. **Steam** engine. 1st series; appendix.

——— of steam engines, Essays on. *See* **Armstrong**, R.

——— of the U. S. *See* **Bartol**, B. H.

——— Practice of boiler engineering. *See* **Armstrong**, R.

——— Preventing explosion of steam. *See* UNITED STATES.

——— Sketch of the invention of vertical tubular. *See* **Historical** sketch.

——— Steam, Construction of, by R. Armstrong. *See* **Campin**, F.

Bois, V. Dictionnaire des arts, etc.; by. *See* **Laboulaye**, C. L.

——— Dictionnaire de l'industrie. *See* **Baudrimont**, A., and others.

Boitard, Pierre. Manuel du cultivateur-forestier. 2 T. 18°. *Paris*, 1834. **45 Manuels Roret.**

——— Manuel du destructeur des animaux nuisibles. *Illus.* 8°. *Paris*, 1834. **110 Manuels Roret.**

——— Manuel du jardinier des primeurs, par. *See* **Noisette, 94 Manuels Roret.**

——— Manuel du naturaliste préparateur. 18°. *Paris* 1835. **17 Manuels Roret.**

——— Nouveau manuel complet des instruments d'agriculture et de jardinage, etc. *Illus.* 8°. *Paris*, 1844.

Bolley, Pompejus. Das Beleuchtungswesen. *Illus.* 8°. *Braunschweig*, 1862. **B. 1, Gr. 2, Bolley's chem. Technologie.**

——— Die chemische Technologie des Wassers. *Illus.* 8°. *Braunschweig*, 1862. **B. 1, Gr. 1, Bolley's chem. Technologie.**

——— Handbuch der chemischen Technologie. 8°. *Braunschweig*, 1862.

Digitized by Google

Bolley, Pompejus. Handbuch der technisch chemischen Untersuchungen. *Illus.* 8°. *Fraunfeld*, 1853.

Bollmann, Friedrich. Photographische Monatshefte. *See* **Photographische.**

——— Photographisch-chemikalisches Lexikon. 8°. *Braunschweig*, 1863.

——— Recept-Taschenbuch für Photographen. 8°. *Leipzig*, 1863. pp. 99

——— Vollständiges Handbuch der Photographie. 8°. *Braunschweig*, 1862.

BOLOGNA. Memorie dell'Accademia delle scienze dell'Istituto di Bologna. 6 v., with index. 4°. *Bologna*, 1867 72.

——— Rendiconto delle sessioni dell'Accademia delle scienze dell'Istituto di Bologna. 4 nos. 8°. *Bologna*, 1868–72.

Bolton, G. Remarks on the present defective state of fire arms, together with an explanation of a newly invented patent gun lock. 8°. *London*, 1795. pp. 88.

Bolton, James. An history of fungusses growing about Halifax. *Illus.* 4°. *Halifax*, 1788. 2 v. bound in one.

BOLTS, Patents for. **Abridgments English patents, No. 60.**

Bomhoff, D. A new dictionary of the English and Dutch language, etc. 16°. *Nimmegen*, 1851.

Bon Ton, Le. Journal des modes. Monthly report of Paris fashions. 16 nos. Imperf. pts. of 3 v., '70, '71, '72. 4°. *New York*, 1870–72.

Bonanni, *Padre.* Descrizione degl'istromenti armonici d'ogni genere. 1 v. and plates. 4°. *Roma*, 1776.

Bonanni, P. Philippus. Catalogus ordinum equestrium celsissimo principi Joanni Willelmo Sac. Rom. Imp. Electori, etc. oblatus. *Romæ*, 1711.

Bond, Thomas E. Dental medicine. 8°. *Philadelphia*, 1851. 2d ed., 1852. **American library of dental science, v. 11.**

——— First dentition, etc. *See* **Baumes,** Thomas E. Same, v. 2.

——— Theory and practice of dental surgery, etc. *See* **Lefoulon,** J. Same, v. 5.

BONE. Handbuch für Beinarbeiter. *See* **Kühn,** H.

——— tissues. Die Bildung des Knochengewebes. *See* **Stieda,** Ludwig.

BONEBLACK Fabrikation des Beinschwarzes. *See* **Rösling,** C. W.

BONN. Naturhistorischen Vereines der preussischen Rheinlande und Westphalens, Verhandlungen des. 8°. *Bonn*, 1856.

Bonnefoux, *Baron* de, and **Paris.** Dictionnaire de marine à voiles et à vapeur. P. 1. Marine à voiles. P. 2. Marine à vapeur. 8°. *Paris*, ...

Bonomi, Joseph. Description of Egyptian court in the crystal palace. *See* **Jones,** O. **Crystal** palace library, v. 1.

BOOK of days. *See* **Chambers,** R.

——— of garden management, containing information on laying out and planting gardens, etc. 12°. *London*, 1862.

——— of sterling exchange on all articles of earthenware. 32°. *Boston*, 1867; another, 1869.

——— of the world. *See* **Fisher,** Richard S.

BOOK-BINDING. *See* **Art** of book-binding.

——— Art of. *See* **Fournier,** Édouard.

——— Art of. *See* **Nicholson,** J. B.

——— Art de la réglure, etc. *See* **Meguin,** A. B. **Encyclopédie** populaire, v. 14.

——— Art du relieur et du doreur de livres, par Dudin. *See* PARIS. **Acad. des sc., arts et métiers, v. 23; also v. 8.**

——— Handbook of taste in. *See* **Handbook.**

——— Die Kunst Bücher zu binden. *See* **Thon,** C. F. G. **2 Neuer Schauplatz der Künste.**

——— Manuel du relieur. *See* **Le Normand,** L. S. **65 Manuels Roret.**

——— Musterzeichnungen von Buchbinderwerkzeugen. *See* HESSE-DARMSTADT.

——— Ornamental art applied to. *See* **Cundall,** J.

——— Die vollkommene Linirkunst. *See* **Vollkommene.**

BOOK-KEEPING. *See* **Adams,** Daniel.

——— *See* **Crittenden,** S. W.

——— *See* **Fairbanks,** Lorenzo.

——— *See* **Foster,** B. F.

——— *See* **Preston,** Lyman.

——— and business transactions. *See* **Palmer,** Joseph H.

——— Autodidactic system. *See* **Dyhrenfurth,** J.

——— by single entry. *See* **Marsh,** C. C.

——— for gas companies. *See* **Fodell,** William P.

——— La ciencia de teneduria de libros. *See* **Marsh,** C. C.

——— Manuel du teneur de livres. *See* **Trémery. 60 Manuels Roret.**

——— Mayhew's university. *See* **Mahew,** Ira.

——— The national system of. *See* **Wright,** William.

Digitized by Google

BOOK-KEEPING. North American accountant. *See* **Duff**, P.

——— rationalized. *See* **Comer**, George N.

——— Rudimentary. *See* **Haddon**, J.

BOOKS. Abridgments English Patents, No. 43.

——— *See* **Bibliography, Catalogues**, etc.

BOOTS and shoes. Boot and shoemaker's assistant; containing a treatise on clicking, and the form and fitting up of lasts scientifically considered. *Illus.* fol. *London*, 1853. pp. 74 and 30.

——— A history of. *See* **Hall**, J. S.

——— Manuel du bottier et du cordonnier. *See* **Morin, J. 57 Manuels Roret.**

——— Manufacturer's assistant. *See* **Richardson**, W. H., *jr.*

——— Der Schuh- und Stiefelmacher. *See* **Schuh. 11 Neuer Schauplatz der Künste.**

Booth, David. An analytical dictionary of the English language. 4°. *London*, 1836.

——— The art of wine making in all its branches. 8°. *London*, 1834.

——— Explanation of scientific terms. LONDON. **Society of useful knowledge, v. 1.**

Booth, James C. Elements of chemistry, ed by. *See* **Regnault**, H. V.

——— The encyclopedia of chemistry, practical and theoretical. 8°. *Philadelphia*, 1850. [2 copies.]

——— and **Morfit,** Campbell. Smithsonian report on recent improvements in the chemical arts. 8°. *Washington*, 1851. **Smiths'n miso. coll., v. 2.** [2 copies.]

Booth, Mary L. Marble-workers' manual. Transl. from French by. *See* **Marble-workers'** manual.

——— New and complete clock and watch makers' manual. 12°. *New York*, 1860.

Bopp, F. A comparative grammar of the Sanskrit, Zend, Greek, Latin, Lithuanian, Gothic, German, and Sclavonic languages. Transl. from German by E. B. Eastwick. 3 v. 8°. *London*, 1862.

Boquillon. Dictionnaire de l'industrie. *See* **Baudrimont, A.**, and others.

BORDEAUX. Académie impériale des sciences, belles-lettres et arts de Bordeaux. Recueil des actes. v. 1–18. 8°. *Paris*, 1839–56.

——— Académie royale des sciences, belles-lettres et arts de Bordeaux. Séance publique. v. for 1820–22, 1824–25, 1827–30, 1832–37. 8°. *Bordeaux*, 182–.

BORDEAUX. Chambre de commerce de. Extraits des procès-verbaux, lettres et mémoires de la chambre de Bordeaux. 2e série. T. 1–6. 8°. *Bordeaux*, 1850–55.

——— La société des sciences physiques et naturelles de Bordeaux. Mémoires. v. 5–9. 8°. *Paris et Bordeaux*, 1865–74.

Bordeaux wine and liquor dealers' guide: a treatise on the manufacture and adulteration of liquors, by a practical liquor manufacturer. 12°. *New York*, 1857.

Borden, Simeon. A system of useful formulæ, adapted to the practical operations of locating and constructing railroads. 8°. *Boston*, 1851.

Borel, Eugène. Grammaire française, à l'usage des Anglais, rev. by E. B. Coe. 12°. *New York*, 1868.

Borgnis, J. A. Traité complet de mécanique appliquée aux arts. v. 1–9. pl. v. 1–2. 4°. *Paris*, 1818–23.

BORING artesian wells. *See* **Budge**, J.

——— Guide du sondeur. *See* **Degousée**, J., and **Laurent**, C.

——— Treatise on. *See* **Swindell**, J. G. **Weale's series, v. 31.**

Bormann, *Maj.-Gen.* The shrapnel shell in England and in Belgium. 8°. *Brussels*, 1859.

Bornemann, C. R Civilingenieur, hrsg. von. *See* **Civilingenieur.**

Bory de Saint Vincent, J. B. G. M. Bibliothèque physico-économique; rédigée par. *See* **Bibliothèque.**

Bosc. Rapport sur une presse à retirer le miel des gâteaux de cire. *See* **Molard** and **Bosc.**

Bossange, Hector. Catalogue de livres français, anglais, allemands, espagnols, grecs et latins, italiens, portugais, orientaux, etc. 8°. *Paris*, 1845. 1r supplément, *Paris*, 1847. 3e supplément, *Paris*, 1850.

Bossange's literary annual. A catalogue of works of note published in France in 1870–71. 8°. *Paris*, 1872.

Bosse, A. Traité des manières de graver en taille douce sur l'airain, par le moyen des eaux fortes et des vernix durs et mols. 8°. *Paris*, 1645.

Bossut, Charles. Résistance des fluides. *See* **Alembert**, J. Le R. d'.

Bostock, John. Natural history of Pliny. Transl. by. *See* **Plinius Secundus**, C.

Digitized by Google

BOSTON. American academy of arts and sciences. Memoirs. v. 1–4. 1st series. 4°. *Boston*, 1785.

——— directory, for the years 1857, 1863, 1865, 1875.

——— Journal of philosophy and the arts. *See* **Webster**, J. W.

——— Public library. 4th annual report of the trustees. 8°. *Boston*, 1856. 14th report, 1866.

——— ——— Index to catalogue of books in lower hall. By C. C. Jewett. 8°. *Boston*, 1858.

——— ——— Index to catalogue of books in upper hall. 8°. *Boston*, 1861.

——— ——— Proceedings at the dedication of the building, Jan. 1, 1858. 8°. *Boston*, 1858.

Bostwick, Homer. A complete practical work on the nature and treatment of venereal diseases of the male and female. 4°. *New York*, 1848.

——— An inquiry into the cause of natural death, or death from old age. 12°. *New York*, 1851.

Boswall, J. D. Plan of a harbor at Granton pier. **Weale's papers on engineering, v. 3.**

Bosworth, J. A dictionary of the Anglo-Saxon language. roy. 8°. *London*, 1838.

BOTANIC garden. *See* **Darwin**, Erasmus.

——— terms, A manual of. *See* **Cooke**, M. C.

BOTANICAL dictionary. *See* **Milne**, Colin.

BOTANIST and florist, The American. *See* **Wood**, Alphonso.

BOTANY, Agricultural. *See* **Darlington**, William.

——— and gardening, A general system of. *See* **Don**, George.

——— American medical *See* **Bigelow**, Jacob.

——— Analecta botanica indica. *See* **Miquel**, F. A. W.

——— Analytical class-book of. *See* **Green**, Francis H., and **Congdon**, Joseph W.

——— Bericht über die österreichische Litteratur der Botanik. *See* VIENNA.

——— by Sir W. Hooker. *See* **Herschel**, *Sir* J. S. W. **Manual** of scientific inquiry.

——— Denkschriften der k. bayerischen botanischen Gesellschaft. *See* REGENSBURG.

——— Éléments de botanique médicale. *See* **Moquin**, Tandon A.

——— Essai sur la géographie des plantes. *See* **Humboldt**, Alex. de.

BOTANY. Eupatoria verticillata, specimens. *See* **Barratt**, J.

——— Field, forest, and garden. *See* **Gray**, Asa.

——— Gefässpflanzen in Ungarn und Slavonien. *See* **Neilreich**, August.

——— A glossary of terms. *See* **Lindley**, J.

——— in the Crystal palace, by E. Forbes. *See* **Latham**, R. G. **Crystal** palace library, v. 3.

——— Introduction to cryptogamic. *See* **Berkeley**, M. J.

——— Ladies'. *See* **Lindley**, John.

——— Medical. *See* **Woodville**, William.

——— Medical and œconomical. *See* **Lindley**, John.

——— Nachträge zu Maly's Enumeratio plantarum phaneroganicarum imperii austriaci. *See* **Neilreich**, A.

——— Natural history of plants. *See* **Smith**, E.

——— North Americam carices. *See* **Barratt**, J.

——— of the northern states. *See* **Gray**, A.

——— of South Carolina and Georgia, A sketch of. *See* **Elliott**, Stephen.

——— of the southern states. *See* **Darby**, John.

——— Outlines of. *See* **Scoffern**, J.

——— Pflanzengeographischer Atlas. *See* **Schouw**, J. F.

——— Plantæ Fremontianæ, by J. Torrey. **Smiths'n contrib., v. 6.**

——— Plantæ Wrightianæ Texano-Neo-Mexicanæ, by A. Gray. **Smiths'n contrib., v. 3–5.**

——— Plantes industrielles. *See* **Heuzé**, G.

——— Principles of. *See* **Henslow**, J. S.

——— The principles of. *See* **Willshire**, W. Hughes.

——— Report on the botanic gardens, Calcutta. *See* CALCUTTA.

——— Revisio critica casuarinarum. *See* **Miquel**, F. A. W.

——— Theatrum botanicum, or the herball of plants. *See* **Parkinson**, John.

——— United States geological exploration of the 40th parallel. v. 5. *See* UNITED STATES. **Geological** exploration.

——— Verhandlungen der k. k. zoologisch-botanischen Gesellschaft. *See* VIENNA.

Both sides of the grape question; comprising—1st. An essay on the culture of the native and exotic grape, by William Saunders; 2d. Physiography in its application to grape culture, by F. J. Cope;

Digitized by Google

Both sides of the grape question—Cont'd.
3d. A contribution to the classification of the species and varieties of the grape vine, with hints on culture, by J. M. McMinn. 12°. *Philadelphia and New York*, 1860. pp. 96.

Bötcher, E. H. Polytechnisches Centralblatt: hrsg. von. *See* **Polytechnisches.**

Botterman, Joseph. Essai sur les combinaisons mécaniques. PARIS. **Acad. roy. des sc., arts et métiers, v. 12; also v. 19.**

Böttger, Rud. Polytechnisches Notizblatt für Gewerbtreibende, Fabrikanten und Künstler. 9ter Jahrg. 8°. *Mainz*, 1854.

—— and **Gräger,** R. Handwörterbuch der technischen Chemie. 8°. *Weimar*, 1867.

BOTTLING. Abridgments English Patents, No. 56.

Bouchardat, A. Annual abstract of therapeutics, materia medica, pharmacy and toxicology. Transl. and ed. by M. J. De Rossert. 18°. *Philadelphia*, 1868.

Boucherie, A. Preserving timber by means of pyrolignite of iron. *See* **Herron, J. Trellis** railway structure.

Bouchu, Étienne Jean. Nouvel art d'adoucir le fer fondu, par Réaumur. *See* PARIS. **Acad. des sc., arts et métiers, v. 8.**

—— and **Courtivron,** G., *Marquis* de. Art des forges et fourneaux à fer. *See* PARIS. **Acad. roy. des sc., arts et métiers, v. 2 and 6.**

Boue, Ami. Physical atlas. *See* **Johnston, A. K.**

Bouguer, M. Traité d'optique sur la gradation de la lumière. 4°. *Paris*, 1760.

Bouillet, Marie Nicolas. Dictionnaire universel des sciences, des lettres et des arts. 8°. *Paris*, 1854.

Boulton, Matthew, A life of. *See* **Smiles.**

Bourdon, Pierre Louis Marie. Arithmetic containing a discussion of the theory of numbers. Transl. from the French by C. S. Venable. 12°. *Philadelphia*, 1858.

Bourgeois, Firmin. Kunst des Staffirmalers, u. s. w. *See* **Watin, M. 207 Neuer Schauplatz der Künste.**

Bourne, John. Armstrong on steam boilers, etc.; notes by. *See* **Campin,** F.

—— A catechism of the steam engine, etc.; its application to mines, mills, steam navigation, and railways. 12°. *New York*, 1851. Another ed., 1864; also ed. 1876.

—— Hand book of the steam engine; containing rules for construction and management of engines of every class: a key to "Catechism of the steam engine." *Illus.* 8°. *London*, 1865.

—— Practice of boiler engineering; rev. by. *See* **Armstrong,** R.

—— A treatise on the screw propeller, with various suggestions of improvement. 4°. *London*, 1852. pp. 44.

—— A treatise on the steam engine in its application to mines, mills, steam navigation, and railways. By the Artisan club. *Illus.* 4°. *London*, 1847. Same, 5th ed., 1861.

Boussac, A. Précis de télégraphie électrique et des connaissances mathématiques, physiques et chimiques indispensables pour la télégraphie. 8°. *Paris*, 1868.

Boussingault, J. B. Rural economy, in its relations with chemistry, physics, and meteorology; or, chemistry applied to agriculture. Transl. from French, with introduction and notes, by George Law. 12°. *New York*, 1845.

Boussingault, M. Agronomie, chimie, agricole, et physiologie. T. 1. 2d ed. 8°. *Paris*, 1860.

Boutard, M. Brevets d'invention; projet de. *See* **Jobard, J. B. A. M.**

Boutell, Charles. Arms and armour, in antiquity and the middle ages; also a description of modern weapons. 12°. *New York*, 1870.

—— Heraldry, historical and popular. 3d ed. 8°. *London*, 1864.

—— English heraldry. 8°. *London*, 1867

Boutereau, C. Das Ganze des Treppenbaues. 16°. *Weimar*, 1845. **140 Neuer Schauplatz der Künste.**

Bouvier. Handbook of oilpainting; compiled from the celebrated manual of Bouvier, etc. *See* **Handbook** of young artists.

Bouvier, John. A law dictionary, adapted to the constitution and laws of the United States of America, etc. 2 v. 8°. *Philadelphia*, 1860.

Bow, Robert H. A treatise on bracing, with its application to bridges, and other structures of wood and iron. 8°. *New York*, 1874.

Digitized by Google

Bowditch, H. J. The young stethoscopist, or the student's aid to auscultation. 16°. *New York,* 1846.

Bowditch, N. I. A history of the Massachusetts general hospital. roy. 8°. *Boston,* 1851.

Bowditch, Nathaniel. The new American practical navigator; an epitome of navigation. 28th ed. 8°. *New York,* 1859.

Bowditch, W. R. On coal gas. A discourse delivered to some directors and managers of gas works. 8°. *London,* 1860. pp. 68.

Bowen, T. J. Grammar and dictionary of the Yoruba language. **Smiths'n contrib., v. 10.**

Bower, George. Gas engineer's book of reference. *Illus.* 4°. *London, n. d.*

Bowling, T. The book of knots; being a complete treatise on the art of cordage. Illustrated by 172 diagrams. 12°. *London,* 1866. pp. 21.

Bowring, *Sir* John. The decimal system in numbers, coins, and accounts, etc. 8°. *London,* 1854.

——— A visit to the Philippine Islands. roy. 8°. *London,* 1859.

Box, Thomas. A practical treatise on heat as applied to the useful arts, for the use of engineers, architects, etc. 12°. *London,* 1868.

BOX of instruments and slide rule. *See* **Kentish,** Thomas.

BOXMAKING. Art du layetier, par J. A. Roubo. PARIS. **Acad. roy. des sc., arts et métiers, v. 19.**

Boyd, Wm. H. The Baltimore city directory, 1858. 8°. *Baltimore,* 1859.

——— Washington and Georgetown directory. 8°. *Washington,* 1858.

Boyer. Manuel du procelainier, du faïencier et du potier de terre; suivi de l'art de fabriquer les terres anglaises et de pipes, ainsi que les poêles, les pipes, les carreaux, les briques, et les tuiles. T. 1–2. 18°. *Paris,* 1827. **35 Manuels Roret.**

Boyle, Robert. The philosophical works of, by Peter Shaw. 3 v. 4°. *London.* 1725.

Boynton, Edward C. History of West Point and its military importance during the American revolution, etc. 8°. *New York,* 1863.

Boy's handy book of sports, pastimes, games, and amusements. 18°. *London.*

Boy's own book, The: a complete encyclopædia of all the diversions, athletic, scientific, and recreative, of boyhood and youth. sq. 8°. *London,* 1852.

BRACING, A treatise on. *See* **Bow,** Robert Henry.

Brackenbury, C. B. European armaments in 1867. 12°. *London,* 1867.

Bracton, and his relation to the Roman law. *See* **Güterbock,** Carl.

Bradbury, Henry. Nature-printing: its origin and objects. 4°. *London,* 1856. pp. 28.

——— Naturselbstdruck: sein Ursprung und Zwecke. 4°. *London,* 1856. pp. 20.
Note.—Bound with Nature-printing.

Braddock, John. A memoir on gunpowder: the principles both of its manufacture and proof. 8°. *London,* 1832.

Bradford, Thos. G. Encyclopædia Americana; ed. by F. Lieber, assisted by. *See* **Encyclopædia.**

——— Encyclopædia of geography; rev. by. *See* **Murray,** H.

Brady, William. The kedge anchor, or young sailor's assistant, etc. *Illus.* 8°. *New York,* 1847. Same, 6th ed., 1852.

Brae, Andrew Edmund. Electrical communication on railway trains. 4°. *London,* 1865.

BRAIDING. Abridgments English Patents, No. 29.

——— Book of. *See* **Lady's** library.

Braidwood, James. Fire prevention and fire extinction; including fire-proof structures, fire-proof safes, public fire brigades, private means for suppressing fires, with illustrations, memoir and portrait of the author. sm. 8°. *London,* 1866.

Braidwood, T. W. Drawing cards. 8°. *Philadelphia,* 1868.

BRAIN, Functions of the; by Prof. Ferrier. **Science lectures for the people, series 7.**

Brainerd, Jehu. Elementary principles of plane and perspective drawing. 2 parts. 2d ed. 8°. *Cleveland,* 1853. pp. 73.

Braithwaite, W. The retrospect of practical medicine and surgery; a half-yearly journal. v. 1–75. 12°. *London,* 1841–76——.

Bramah, T. Principles of warming and ventilation. Appendix by. *See* **Tredgold,** T.

Brand, John. Observations on popular antiquities, including the whole of Mr.

Digitized by Google

Brand, John—Continued.
Bourne's Antiquitates Vulgares, with addenda; also an appendix. 8°. *London*, 1810.

Brande, William Thomas. A dictionary of science, literature, and art. *Illus.* *New York.* 1845.

—— Journal of science and the arts; ed. by. *See* LONDON.

—— A manual of chemistry. 2 v. 8°. *London*, 1848.

—— The subject matter of a course of ten lectures on some of the arts connected with organic chemistry, etc. 16°. *London*, 1854.

—— and **Cox,** George W. A dictionary of science, literature and art. 3 v. roy. 8°. *London*, 1865.

—— and **Taylor,** A. S. Chemistry. 8°. *Philadelphia*, 1863.

Brandely, A. Die Operationen, Manipulationen und Geräthschaften der Electro-Chemie. Aus dem Französischen von F. Harzer. 8°. *Weimar*, 1849. **174 Neuer Schauplatz der Künste.**

Brandt, E. Lehrbuch der Eisen-Konstruktionen, mit besonderer Anwendung auf den Hochbau. 8°. *Berlin*, 1865.

Brandt, J. D. Gunnery catechism, as applied to the service of naval ordnance. 24°. *New York*, 1870.

BRANDY. Anleitung zum Branntweinbrennen. *See* **Thon,** C. F. G. **95 Neuer Schauplatz der Künste.**

—— Branntweinbrennereibetrieb. *See* **Schmidt,** C. H. **215 Neuer Schauplatz der Künste.**

Brard, C. P. Dictionnaire usuel de chimie, de physique et d'histoire naturelle. 8°. *Paris*, 1855.

BRASS. Art de convertir le cuivre rouge en laiton, par Galon. PARIS. **Acad. roy. des sc., arts et métiers, v. 7, 8.**

—— Designs for iron and brass work, 15th and 16th centuries. *See* **Pugin,** A. W.

—— founder's guide. *See* **Larkin,** J.

BRAZIL. Brazilian biographical annual, 1876. *See* **Macedo,** Joaquim Manuel de.

—— Life in. *See* **Ewbank,** T.

BREAD and bread making, A treatise on. *See* **Graham,** Sylvester.

—— making. **Abridgments English Patents, No. 61.**

—— stuffs. Enquête sur la boulangerie du département de la Seine, etc. *See* **Enquête** sur la boulangerie.

Breakfast, dinner and tea, viewed classically, poetically and practically. sm. 4°. *New York*, 1865.

Breban's interest tables; exhibiting at a glance the interest on any sum from $1 to $10,000. 8°. *Philadelphia*, 1850.

Brébisson, Alphonse de. Méthodes photographiques; procédé sur collodion sec. *See* **Chevalier,** C.

Bree, C. R. Species not transmutable, nor the result of secondary causes; being a critical examination of Mr. Darwin's work entitled "Origin and variation of species." 8°. *London*, 1861.

BREECH-LOADERS, Modern. *See* **Greener,** W. W.

BREECH-LOADING and magazine small arms, except revolvers. *See* **Stockbridge,** V. D.

—— small arms, American. *See* **Norton,** Charles B.

Breed, Daniel. Principles of organic and physiological chemistry; transl. by. *See* **Löwig,** K. J.

Breen, Hugh. Practical astronomy, by. *See* **Young,** J. R.

Brees, S. C. The illustrated glossary of practical architecture and civil engineering: comprising office and field work, the steam engine, mechanical engineering, surveying, levelling, use of instruments, mining and quarrying, manufacture of iron, bricks, lime and cements, carpentry, joinery, bricklaying and masonry, slating, painting and glazing, building, etc. 8°. *London*, 1852.

—— Series of railway practice. 1st–4th: a collection of working plans, and practical details of construction in the public works of the most celebrated engineers. 3d and 4th series transl. by A. Perdonnet and C. Plonceau. 1 v. text, 4°. 4 v. plates, fol. *London*, 1847.

Breese, Samuel. Cerographic atlas of the United States. *See* **Morse,** S. E.

Brégeant, R. L. Manuel complet théorique et pratique du dessinateur et de l'imprimeur lithographe. *Illus.* 18°. *Paris*, 1827. **116 Manuels Roret.**

—— Manual of lithography; selections from. *See* **Raucourt.**

Bréguet, Louis. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

—— Manuel de la télégraphie électrique à l'usage des employés des chemins de fer. *Illus.* 12°. *Paris*, 1853.

Digitized by Google

Bréguet, Louis. Manuel de télégraphie électrique. 4th ed. *Illus.* 12°. *Paris,* 1862.

Breithaupt, F. W. Beschreibung eines Reichenbach'schen Wiederholungs-Kreises, etc. 4°. *Cassel,* 1835.

Breithof, M. A key to the correct pronunciation of the French language. 16°. *Boston,* 1866. pp. 52.

Bremer, Frederika. Rural essays; letters from. *See* **Downing,** A. G.

Brereton, John N. Floræ Columbianæ prodromus. 24°. *Washington,* 1830.

BRESLAU. Schlesischer Gewerbetag in Breslau, 1862–74. 8°. *Breslau,* 1862–74.

——— Sechsundvierzigster Jahres-Bericht der schlesischen Gesellschaft für vaterländische Cultur im Jahre 1868. 8°. *Breslau,* 1869.

Breslauer Gewerbe-Blatt. Organ des schlesischen Central- und Breslauer Gewerbe-Vereins. roy. 8°. *Breslau,* 1862–64.

Bresse. Cours de mécanique appliquée. 2e partie. Hydraulique. 8°. *Paris,* 1860.

——— Hydraulic motors. Transl. from the French Cours de mécanique appliquée by F. A. Mahan. 8°. *New York,* 1869.

Breulier, Adolphe, and **Gardissal,** Ch. D. Du régime de l'invention. Examen des améliorations proposées à la legislation relative aux inventions, etc. 8°. *Paris,* 1862.

BREVETS d'invention en France. *See* FRANCE.

——— d'invention, publiés en Belgique. *See* BELGIUM.

Brewer, E. Cobham. Dictionary of phrase and fable, giving the derivation, source, or origin of common phrases, allusions, and words that have a tale to tell. 12°. *Philadelphia, n. d.*

Brewer, Thomas M. North American oölogy. **Smiths'n contrib., v. 11.**

BREWER'S guide, The private. *See* **Tuck,** John.

BREWING. *See* **Remarks** and experiments on, etc.

——— Die Anlage von Bierbrauereien. *See* **Fasbender,** Franz.

——— Die Bierbrauerei. *See* **Heiss,** Philipp.

——— Die Bierbrauerei aus Kartoffeln. *See* **Ludowig,** H. **164 Neuer Schauplatz der Künste.**

——— Die Bierbrauerei, die Branntwein-Brennerei, und die Liqueurfabrikation. *See* **Otto,** Fr. Jul.

——— Die Bierbrauereiwissenschaft. *See* **Balling,** Carl J. N.

BREWING. Grundsätze der Bierbrauerei. *See* **Schmidt,** C. H. **96 Neuer Schauplatz der Künste.**

——— Handbuch für Bierbrauer. *See* **Müller,** P.

——— Malzbereitung und Bierfabrikation. *See* **Thausing,** Julius E.

——— Manuel du brasseur. *See* **Acoum,** F. **105 Manuels Roret.**

——— Practical brewer. *See* **Byrn,** M. L.

——— A practical treatise on. *See* **Black,** William.

——— Der rationelle Brennereibetrieb. *See* **Schubert,** E.

——— Die Schule der Bierbrauerei. *See* **Habich,** G. E.

——— Theory and practice of. *See* **Ham,** J.

——— Treatise on. *See* **Morrice,** A.

Brewster, *Sir* David. Double refraction and polarization of light. LONDON. **Society of useful knowledge, v. 1.**

——— The Edinburgh encyclopædia, in 18 v. 4°. *Edinburgh,* 1830.

——— The Edinburgh journal of science. Old series, v. 1–10, 1824–29. New series, v. 1–6, 1829–32. 8°. *Edinburgh and London,* 1824–32.

——— The kaleidoscope, its history, theory, and construction, with its application to the fine and useful arts. 2d ed. *Illus.* 8°. *London,* 1858.

——— Letters on natural magic, addressed to Sir Walter Scott. 24°. *New York,* 1832.

——— Lives of literary and scientific men of Italy, etc. *See* **Shelley,** M. W. **Lardner's cabinet cyclopædia, v. 88–90.**

——— Manuel d'optique. Traduit par M. P. Verguaud. T. 1–2. *Illus.* 18°. *Paris,* 1833. **19 Manuels Roret.**

——— Physical atlas; by. *See* **Johnston,** A. K.

——— The stereoscope, its history, theory, and construction, with its application to the fine and useful arts, and to education. *Illus.* 8°. *London,* 1856.

——— Das Stereoskop, seine Geschichte, Theorie und Construction, etc. Aus dem Englischen von C. H. Schmidt. *Illus.* 8°. *Weimar,* 1857. **35 Neuer Schauplatz der Künste.**

——— System of mechanical philosophy; notes by. *See* **Robinson,** J.

——— A treatise on optics. 16°. *London,* 1853. 2 copies. **Lardner's cabinet cyclopædia, v. 105.**

Digitized by Google

Brewster, *Sir* David. Treatise on optics, by. *See* LONDON. **Society of useful knowledge, v. 1.**

——— Works of Ferguson; ed. by. *See* **Ferguson, J.**

Breyfogle, William L. Epitome of homœopathic medicines. 18°. *Philadelphia*, 1869.

Briaune. Du prix des grains, du libre échange et des réserves. 8°. *Paris*, 1857.

BRICK and marble in the middle ages. *See* **Street,** George E. mund.

BRICK-MAKING. Art du briquetier, par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sc., arts et métiers, v. 14; also v. 4.**

BRICK-WORK. Der Backstein-Rohbau. *See* **Fleischinger,** A. T., and **Becker,** W. A.

BRICKS and tiles. **Abridgments English Patents, No. 22.**

——— ——— Art de fabriquer la brique et la tuile en Hollande, par G. Jars. PARIS. **Acad. roy. des sc., arts et métiers, v. 14.**

——— ——— Manufacture in Holland. **Weale's papers on engineering, v. 3.**

——— Art de fabriquer les briques. *See* **Martin, E. Encyclopédie populaire, v. 11.**

——— Manufacture of. *See* **Dobson, E. Weale's series, No. 23.**

——— Der Ziegler. *See* **Schaller, P. 34 Neuer Schauplatz der Künste.**

BRIDESBURG, Pa. Directory for 1855. *See* **McElroy,** A. Philadelphia directory.

Bridge, B. Six lectures on the elements of plane trigonometry; with the method of constructing tables, etc. 8°. *Braxbourn, Herts*, 1810.

Bridgeman, Laura, Vocal sounds of, by F. Lieber. **Smiths'n contrib., v. 2.**

Bridgeman, Thomas. The young gardener's assistant, containing catalogues of garden and flower seed, etc. 8°. *New York*, 1849.

Bridges, Robert. American journal of pharmacy, ed. by. *See* **American.**

——— Elements of inorganic chemistry, ed. by. *See* **Graham,** T.

BRIDGES. **Abridgments English Patents, No. 36.**

——— and roads. Mémoires et documents relatifs à l'art des constructions, etc., des ponts et chaussées. *See* **Annales** des ponts et chaussées.

——— Der Brückenbau. *See* **Becker,** M.

——— ——— *See* **Schwartz,** F.

BRIDGES. Construction der Brücken von Mauerwerk. *See* **Fontenay,** T.

——— Construction of. *See* **Haupt,** Herman.

——— Construction of, in cast and wrought iron. *See* **Humber,** William.

——— Construction of oblique, by W. H. Barlow. **Weale's papers on engineering, v. 4.**

——— Construction of Victoria bridge in Canada. *See* **Hodges,** J.

——— Construction of wrought iron. *See* **Latham,** J. H.

——— Details of laminated arch forming the bridge over the Ouse, by J. S. Valentine. *See* **Haskoll,** W. D. **Assistant** eng. railway guide.

——— Eiserne Brücken-Constructionen. *See* **Klein,** L. von.

——— Équipages de ponts militaires en Europe. *See* **Birago.**

——— Essay on oblique. *See* **Buck,** G. W.

——— Iron bridge across the Nevka. *See* **Weale's papers on engineering, v. 3.**

——— Iron. Die Brücken in Eisen, etc. *See* **Heinzerling,** F.

——— Malleable iron. *See* **Dempsey,** G. D.

——— Memoir on suspension. *See* **Drewry,** C. S.

——— Military. *See* **Haupt,** H.

——— Military, by Capt. G. W. Cullum. *See* UNITED STATES. **Papers on engineering.**

——— Ponts militaires. *See* **Meudra,** H.

——— Principle, construction, and execution of. *See* **Town,** I.

——— Principles and construction of military. *See* **Douglas,** *Sir* H.

——— Specimens of. *See* **Duggan,** George.

——— Stone, iron and wood. *See* **Duggan,** George.

——— Système de ponts en fonte à tablier suspendu. *See* **Lehardy de Beaulieu,** A.

——— Theory and architecture of, by W. Hosking. **Weale's theory of bridges, v. 2.**

——— Theory of, by J. Hann. *See* **Weale's theory of bridges, v. 1.**

——— Theory of bridge construction. *See* **Haupt,** H.

——— Theory, practice and architecture of. *See* **Weale,** John.

——— Traité des ponts. *See* **Gautier,** H.

——— Treatise on bridge architecture. *See* **Pope,** T.

Digitized by Google

BRIDGES. Tubular and other iron girder bridges. *See* **Dempsey, G. D. Weale's series, No. 43.**

——— Tubular bridges, particularly describing the Britannia bridge. *See* **Dempsey, G. D.**

——— Viaducts and aqueducts. **Abridgments English Patents, No. 36.**

——— Vorlegeblätter zur Brückenbaukunde. *See* **Bauernfeind, C. M**

——— Wrought iron. *See* **Fairbairn, W.** Application of iron.

BRIDGEWATER treatise, The ninth. *See* **Babbage, Charles.**

Brierre de Boismont, A. Hallucinations, or the rational history of apparitions, visions, dreams, ecstasy, magnetism, and somnambulism. 1st Amer. from 2d Paris ed. 8°. *Philadelphia*, 1853.

Briggs, and others. Mathematical tables, contrived after a most comprehensive method, viz: A table of logarithms, tables of natural sines, tangents and secants, tables of natural versed sines, with their construction and use. 8°. *London*, 1726.

Bright, Edward B. The electric telegraph. *See* **Lardner, Dionysius.**

Brindley, James, A life of. *See* **Smiles.**

——— Memoir of, by S. Hughes. *See* **Weale's papers on engineering, v. 1.**

Brinton, William. On food and its digestion; being an introduction to dietetics. 12°. *London*, 1861.

Brisbane, James. Nautical dictionary. *See* **Young,** Arthur.

Brisse, L. Album de l'exposition universelle. T. 1-2. 4°. *Paris* 1856-57.

Brisson, Mathurin Jacques. Pesanteur spécifique des corps. 4°. *Paris*, 1787.

Bristow, Henry William. A glossary of mineralogy. 8°. *London*, 1861.

British almanac, The. 43 v., 1832-75. *London*, 1832-75. Vols. for 1849, 1850, and 1865 wanting.

——— and foreign medico-chirurgical review, The, or quarterly journal of practical medicine and surgery. v. 3-4, 1849; v. 15-58, 1855-76. 46 v. 8°. *London*, 1849-76.

——— association for the advancement of science; Glasgow, 1855. Proceedings relating to the patent laws which took place in section G, mechanical science. 16°. *London*, 1855. pp. 17. [2 copies.]

British association for the advancement of science, Reports of the. 1831-75. 8°. *London*, 1835-76.

——— catalogue of books published from October, 1837, to December, 1852. *See* **Low, S.**

——— horological institute. Horological journal; organ of. *See* LONDON.

——— journal photographic almanac, The; ed. by James Martin and others. 1863-76. 32°. *Liverpool*, 1863-76.

——— journal of photography; ed. by Geo. Shadbolt. 8° and 4°. *London*, 1854-76.

——— museum. *See* LONDON.

——— museum, Report from the select committee of the House of Commons on the condition, management, and affairs of the. *See* GREAT BRITAIN.

——— negotiator, The. *See* **Thomas, S.**

——— North America. Trade and commerce of the colonies with other countries. *See* UNITED STATES.

——— North American colonies, Trade and commerce of the. Andrew's report. *See* UNITED STATES.

——— Provinces of North America, Fish and fishing of. *See* **Herbert, H. W.**

——— Provinces of North America, Geological map of the. *See* **Marcou, J.**

——— Provinces of North America, Horses and horsemanship of. *See* **Herbert, H.W.**

——— Provinces in North America, Manual of public libraries, etc., in. *See* **Rhees, W. J.**

——— quarterly review, The. v. 53-58, 1871-76. Amer. ed. 8°. *New York*, 1871-76——.

——— soldier's compendium. *See* **Griffiths, F. A.**

——— statutes, A digest of. *See* **Roberts, Samuel.**

——— synonymy. *See* **Piozzi, Hester Lynch.**

Britten, Bashley. The Armstrong gun compared with rifled cast iron service guns. 8°. *London*, 1862. pp. 16.

Britton, John. The fine arts of the English school; with biographical and descriptive essays; ed. by. *Illus.* fol. *London*, 1812.

——— Public buildings of London; by. *See* **Pugin, A.**

——— and **Pugin,** Augustus. Historical and descriptive essays accompanying a series of engraved specimens of the architectural antiquities of Normandy. 4°. *London*, 1833. pp. 64.

Digitized by Google

Britton, Thomas Allen. A treatise on the origin, progress and cause of dry rot in timber; with remarks on the means of preserving wood from destruction by sea worms, beetles, etc. 8°. *London*, 1875.

Brizé-Fradin, C. A. La chimie pneumatique appliquée aux travaux sous l'eau, dans les puits, les mines, les fosses, etc. 8°. *Paris*, 1808.

Brockett, John Trotter. A glossary of north country words, etc. 8°. *Newcastle-upon-Tyne*, 1846.

Brockett, L. P. The silk industry in America; a history, prepared for the centennial exposition. 8°. *New York*, 1876.

Brockhaus, H. Allgemeine Encyclopædie, 1ste Section; hrsg. v. *See* **Ersch,** J. S., and **Gruber,** J. G.

Brocklesby, John. Elements of meteorology. 12°. *New York*, 1860.

Brodeuse illustrée, La. Journal spécial et complet des travaux de dames. 1 v. [Imperfect.] fol. *Paris*, 1860–61. *n. t. p.*

BROKERAGE. Manuel du courtier. *See* **Peuchet. 28 Manuels Roret.**

Bromwell, William J. History of immigration to the United States, exhibiting the number, sex, age, occupation, and country of birth, of passengers arriving in the United States by sea from foreign countries, from Sept. 30, 1819, to Dec. 31, 1855. 8°. *New York*, 1856.

BRONCHITIS and kindred diseases. *See* **Hall,** W. W.

Brongniart, Alexandre. Das Coloriren und Decoriren des ächten Porcellans, des Fritteporcellans, des englischen Steinguts, des Wedgwoodgeschirrs, des Steinzeugs, etc. *Illus.* 8°. *Weimar*, 1846. **146 Neuer Schauplatz der Künste.**

——— Traité élémentaire de minéralogie, avec des applications aux arts. 2 v. 8°. *Paris*, 1807.

Bronner, Edward. Chemistry of food; transl. by. *See* **Gore,** G.

Bronson, C. P., and **Beers,** Charles C. Stammering, its effects, causes and remedies. 18°. *Boston*, 1855.

BRONZE. Handbuch des Broncearbeiters. *See* **Wallack,** A.

——— Real bronze hardware. *See* Russel and Erwin.

Brooke, Charles. Elements of natural philosophy; by. *See* **Bird,** G.

Brooke, Henry. A guide to the stars; an easy method of knowing the relative position of all the fixed stars, etc. 4°. *London*, 1820.

Brookes, Richard. A new universal gazetteer. *Illus.* 8°. *New York*, 1835.

BROOKLYN PARK, N. Y. 10th annual report of the commissioners. 8°. *Brooklyn*, 1870.

Brooks, Artemas L., and others. Supreme court of the United States. No. 236. Artemas L. Brooks, Ignatius Tyler, William W. Woodworth, as administrator of Wm. Woodworth, deceased, and also as grantee, and James G. Wilson, appellants, vs. John Fiske and Nicholas G. Norcross. 8°. *Washington. n. t. p.*

Note.—Bound with Harding's report of the case of Stoat vs. Spring et al.

Brooks, L. A short and easy method for obtaining, by the help of a table, the average time upon bills of merchandise, notes, accounts, etc. 8°. *Great Falls, N. H.*, 1851. pp. 33.

Brooks, S. H. Rudimentary treatise on the erection of dwelling-houses. 12°. *London*, 1860. **Weale's series, 132.**

——— City, town, and country architecture. *Illus.* fol. *London*, 1847. pp. 48.

Brougham, Henry, *Lord.* Dialogues on instinct; with an analytical view of the researches of fossil osteology. 24°. *London*, 1844.

——— Objects, advantages and pleasures of science; by. LONDON. **Society of useful knowledge, v. 1.**

——— Tracts, mathematical and physical. 8°. *London and Glasgow*, 1860.

——— Treatise on hydrostatics; by. LONDON. **Society of useful knowledge, v. 1.**

——— and **Routh,** E. J. Analytical view of Sir Isaac Newton's Principia. 8°. *London*, 1855.

Brown, Andrew. The philosophy of physics, or process of creative development. roy. 8°. *New York*, 1854.

Brown, Andrew Betts. Engineering facts and figures, 1863–68. *London and Edinburgh*, 1864–69.

Brown, Henry T. Five hundred and seven mechanical movements, embracing all those which are most important in dynamics, hydraulics, hydrostatics, pneumatics, steam engines, mill and other gearing, presses, horology, and miscella-

Digitized by Google

Brown, Henry T.—Continued.
neous machinery. 8°. *New York*, 1868. [5 copies.]

Brown, James. The first round in the ladder of education. 18°. *Philadelphia*, 1849. pp. 36.

Brown, John. The description and use of the triangular quadrant. 24°. *London*, 1671.

Brown, John S. Catalogue of patents granted by the U. S. prior to 1857. *See* UNITED STATES.

Brown, J. P. H. The teeth, their health, disease and treatment. 16°. *Augusta, Ga.*, 1867.

Brown, O. B. Jousse's Catechism of music and Burrowes's Piano-forte primer and guide to practice combined. 12°. *Boston*, 1869.

Brown, Solyman. Dentologia: a poem on the diseases of the teeth, and their proper remedies; with notes, practical, historical, illustrative and explanatory by Eleazar Parmly. 8°. *New York*, 1840. **American library of dental science, v. 2.**

Brown, Thomas. The works of the learned Sir Thomas Brown, Kt., containing, 1. Enquiries into vulgar and common errors. 2. Religio medici, with annotations and observations upon it. 3. Hydriotaphia, or urn burial, together with the garden of Cyrus. 4. Certain miscellany tracts, with alphabetical tables. fol. *London*, 1686.

Brown, Thomas. Indicator and dynamometer applied to the steam engine. *See* **Main,** T. J., and **Brown,** T.

——— Marine steam engine. *See* **Main,** T. J.

BROWN University. *See* PROVIDENCE, R. I.

Browne, D. J. The American poultry yard; comprising the origin, history, and description of the different breeds of domestic poultry. 12°. *New York*, 1850.

——— The field book of manures; or the American muck book, etc. 12°. *New York*, 1853.

——— The trees of America, native and foreign, pictorially and botanically delineated, and scientifically and popularly described, etc. 8°. *New York*, 1846.

Browne, J. Ross. Etchings of a whaling cruise, with notes of a sojourn on the island of Zanzibar, etc. 8°. *New York*, 1846.

——— Resources of the Pacific slope: a statistical and descriptive summary of the mines, minerals, climate, topography, agriculture, commerce, manufactures, and miscellaneous productions of the states and territories west of the Rocky mountains, etc. 8°. *New York*, 1869.

Browne, Peter A. Classiscope; by. *Philadelphia*, 1848. 1 large sheet.

Browne, William. The carpenter's assistant; containing a succinct account of Egyptian, Grecian, and Roman architecture. 4°. *Worcester*, 1848.

Browne, William Henry. A treatise on the law of trade marks, and analogous subjects. 8°. *Boston*, 1873. [2 copies.]

Bruce, George. An abridged specimen of fonts of type, etc. 4°. *New York*, 1865.

Bruce, John Collingwood. The Roman wall, an historical and topographical description of the barrier of the lower isthmus, extending from the Tyne to the Solway. 4°. *London*, 1853.

Bruce and co. Specimens of printing types, cast by. 8°. *New York*, 1848.

Brücke, Ernst. Die Physiologie der Farben für die Zwecke der Kunstgewerbe. 8°. *Leipzig*, 1866.

Brückmann, C. R. Civilingenieur; hrsg. von. *See* **Civilingenieur.**

——— Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

Brun. Dictionnaire des arts, etc.; par. *See* **Laboulaye,** C. P. L.

Brunel, Sir Marc Isambard, Life of. *See* **Beamish,** R.

Brunet, Jacques Charles. Manuel du libraire et de l'amateur de livres, contenant, 1°. Un nouveau dictionnaire bibliographique. 2°. Une table en forme de catalogue raisonné. 5e éd. T. 1–6. 8°. *Paris*, 1860–65.

BRUSHES. Der Bürstenfabrikant. *See* **Hoppe,** K.

BRUSHING. Abridgments English Patents, No. 57.

Brussel de Brulard. Mémoire sur les fusées de guerre fabriquées à Hambourg en 1813 et 1814, et à Vincennes en 1815. Texte, 8°. Planches, 4°. *Paris*, 1853.

BRUSSELS. Académie royale des sciences et belles lettres. Des moyens de soustraire l'exploitation des mines de houille aux chances d'explosion. 8°. *Bruxelles*, 1840.

——— La Belgique industrielle; compte rendu de l'exposition des produits de l'industrie en 1835. 8°. *Bruxelles*, 1836.

Digitized by Google

BRUSSELS. Exposition de l'industrie belge en 1841. Rapports du jury. 8°. *Bruxelles*, 1842.

——— Exposition de l'industrie belge en 1847. Rapports du jury. 8°. *Bruxelles*, 1848.

——— Musée de l'industrie. Bulletin, red. par J. B. A. M. Jobard. 45 v. roy. 8°. *Bruxelles*, 1841–61.

——— Des naissances dans la ville de Bruxelles considérées dans leur rapport avec la population. *See* **Heuschling**, Xavier.

Bryan, James. A treatise on the anatomy, physiology, and diseases of the human ear. 8°. *Philadelphia*, 1851.

Bryant, Edwin. What I saw in California; the journal of a tour, by the emigrant route and South pass of the Rocky mountains, across the continent of North America, the great desert basin, and through California, in 1846–47. 12°. *New York*, 1848.

Bryas, *Marquis* Charles de. Études pratiques sur l'art de dessécher, et diverses impressions de voyage. Théorie du drainage. 24°. *Paris*, 1857.

Bryce, T. A. The American commercial arithmetic. 8°. *Oswego, N. Y.*, 1866.

Bryson, Alexander. Medical statistics. *See* **Herschel,** *Sir* J. F. W. **Manual** of scientific enquiry.

Buch, J. G. Schlossermeister; Beiträge von. *See* **Grandpré,** L. M. J. O. de.

Buchan, Alexander. A handy book of meteorology. 12°. *Edinburgh and London*, 1867.

Buchanan, Joseph R. Outlines of lectures on the neurological system of anthropology, as discovered, demonstrated and taught in 1841 and 1842. 4 parts. 1. Phrenology. 2. Cerebral physiology. 3. Pathognomy. 4. Sarcognomy. 8°. *Cincinnati*, 1854.

Buchanan, Robert. The culture of the grape, and wine making. Appendix. Cultivation of the strawberry, by N. Longworth. 12°. *Cincinnati*, 1852.

Buchanan, Robertson. Examples of tools and machines. *See* **Rennie,** G.

——— Practical essays on mill work, and other machinery: with notes and additions by Thomas Tredgold. Also additions by George Rennie. 3d ed. *Illus.* Text, 8°. Plates, fol. *London*, 1841.

Buchanan, Robertson. A treatise on the economy of fuel, and management of heat, especially as it relates to heating and drying by steam. *Illus.* 8°. *Glasgow*, 1815.

Buchanan, W. M. A technological dictionary. 12°. *London*, 1846. 4th ed. *London*, 1861.

Buchner, Ludwig Andreas, *jr.* Ueber den Antheil der Pharmacie an der Entwicklung der Chemie. 4°. *München*, 1849. pp. 20.

Buchner, P. T. Lehrbuch der anorganischen Chemie. 8°. *Braunschweig*, 1871.

Buchwalder, Édouard. Canons rayés, systèmes Armstrong et Whitworth, leur construction, leur puissance. *Illus.* 8°. *Genève*, 1860. pp. 42.

Buck, C. Elton. American gas-light journal; ed. by. *See* **American.**

Buck, George Watson. A practical and theoretical essay on oblique bridges. 4°. *London*, 1839. pp. 43.

Buckland, William. Geology and mineralogy, considered with reference to natural theology. 2 v. 8°. *London*, 1836.

Buckler, Thomas H. On the etiology, pathology, and treatment of fibro-bronchitis and rheumatic pneumonia. roy. 8°. *Philadelphia*, 1853.

Buckley, Arabella B. A short history of natural science, etc. 12°. *New York*, 1876.

Budge, J. The practical miner's guide: a treatise on mine engineering, comprising tables adapted to oblique or diagonal, vertical, horizontal, and transverse dialling, etc.; on gases, ventilation, and lighting of mines; boring artesian wells, etc. 8°. *New York*, 1858.

Buehler, Otto. Photographisches Memorial. Recept-Taschenbuch, etc. 16°. *Weimar*, 1868.

Buel, Jesse. Cultivator; ed. by. *See* **Cultivator.**

Buel, Richard H. Safety valves. 18°. *New York*, 1876. **Van Nostrand's scien e series, No. 21.**

BUENOS AYRES. Informe de la oficina de patentes de invencion, correspondiente al año de 1867. 8°. *Buenos Aires*, 1868.

Buff, H. Annual report of the progress of chemistry. *See* **Liebig,** J. v., and **Kopp,** H.

——— Jahresbericht über die Fortschritte der Chemie; unter Mitwirkung von. *See* **Liebig,** J. v., and **Kopp,** H.

Digitized by Google

BUFFALO, N.Y. Annual reports (26th and 27th) of the executive committee of the Young men's association of the city of Buffalo. 8°. *Buffalo*, 1862–63.

Bühl, L. Ueber die Stellung und Bedeutung der pathologischen Anatomie. 4°. *München*, 1863. pp. 15.

Builder, The. An illustrated weekly magazine, for the architect, etc. v. 1–34. fol. *London*, 1843–76——.

——— The practical. *See* **Nicholson,** P.

BUILDING, Art of. *See* **Dobson,** E. **Weale's series, No. 22.**

——— Atlas des Bauwesens. *See* **Frankel,** Wilhelm, and **Heyn,** Rudolf.

——— chronicle, The; a journal of architecture and the arts. v. 1 and 2. Nos. 1–41. 4°. *Edinburgh*, 1855-56.

——— Nouvelles annales de la construction. *See* **Oppermann,** C. A.

——— Observations on stone used for. *See* **Smith,** C. H.

——— Treatise on foundations and concrete works. *See* **Dobson,** E. **Weale's series, No. 44.**

Buist, Robert. American flower-garden directory; containing directions for the culture of plants in the flower garden, hot-house, green-house, rooms, or parlor windows. 12°. *Philadelphia*, 1851.

BULBS. *See* **Rand,** Edward Sprague, *jr.*

——— Essais sur l'histoire et la culture des plantes bulbeuses. *See* **Lemaire,** Ch.

Bull, Marcus. Experiments to determine the comparative value of the principal varieties of fuel used in the United States, and also in Europe. 8°. *Philadelphia*, 1827.

Bulletin de la Classe d'agriculture de la Société des arts de Genève. *See* GENEVA.

——— de la Classe d'industrie et de commerce de la Société des arts de Genève. *See* GENEVA.

——— de la Société d'agriculture, industrie, sciences et arts du département de la Lozère. *See* MENDE.

——— de la Société d'agriculture, sciences et arts de La Sarthe. *See* LE MANS.

——— de la Société d'encouragement pour l'industrie nationale. *See* PARIS.

——— de la Société impériale des naturalistes de Moscou. *See* MOSCOW.

——— de la Société industrielle de Mulhouse. *See* MULHOUSE.

——— de la Société zoologique d'acclimatation. *See* PARIS.

Bulletin des Neuesten und Wissenswürdigsten, etc. *See* **Hermbstädt,** Sigismund Friedrich.

——— des seances de la Société impériale et centrale d'agriculture de France. *See* FRANCE.

——— du Conseil supérieur d'agriculture en Belgique. *See* BELGIUM.

——— du Musée de l'industrie. *See* BRUSSELS.

——— of the United States national museum. *See* UNITED STATES.

BULLION dealer's guide. *See* **Edelman,** George W.

Bullions, Peter. The principles of Greek grammar, etc. Revised by A. C. Kendrick. 12°. *New York*, 1867.

——— The principles of Latin grammar, etc. Revised by C. D. Morris. 12°. *New York*, 1867.

Bullock, J. Lloyd. Chemical analysis; ed. by. *See* **Fresenius,** C. R.

Bunsen, Robert. Gasometrische Methoden. *Illus.* 8°. *Braunschweig*, 1867.

Bunten. Institut de France. Académie royale des sciences. Rapport sur un baromètre. 8°. *Paris*, 1828.

Burat, Amédée. Les houillères en 1867, d'après les documents de l'exposition universelle. Texte, 8°. Atlas, 4°. *Paris*, 1868.

——— Les houillères en 1868, 1869, 1872. Texte, 8°. Atlas, 4°. *Paris*, 1869–72.

Note.—Vols. for 1869 and 1872 are entitled "Comité des Houillères Françaises."

——— Supplément au matériel des houillères en France et en Belgique. 8°. *Paris*, 1865.

Burat, Jules. Exposition de l'industrie française, année 1844. Description méthodique, etc. *Illus.* T. 1–2. 4°. *Paris*, *n. d.*

Burck, August. Vollständiges Handbuch für Juweliere, Gold-, Silber- und Schmuckarbeiter, etc. 8°. *Ilmenau*, 1834. **63 Neuer Schauplatz der Künste.**

Burdell, Harvey and John. Observations on the structure, physiology, anatomy, and diseases of the teeth. *Illus.* 8°. *New York*, 1838. pp. 96. **American library of dental science, v. 1.**

Burden, Henry. Troy iron and nail factory vs. Corning et al., for the infringement of Burden's patent. *See* **Blatchford,** S.

Burg, A. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

Digitized by Google

Burg, A., and son. Illustrirtes Maschinen-Verzeichniss. 4°. *Wien*, 1857. pp. 81.

Burg, M. Das Zeichnen und Aufnehmen des Artillerie-Materials, etc. Text, 4°. Plates, fol. *Berlin*, 1845.

Burges, William. Art applied to industry. A series of lectures. 8°. *Oxford and London*, 1865.

Burgess, John Cart. A practical essay on the art of flower painting. 8°. *London*, 1811.

Burgess, N. G. The photograph and ambrotype manual. 12°. *New York*, 1858.

——— The photograph manual; containing the carte de visite process, and method of taking stereoscopic pictures. 12°. *New York*, 1862.

Burgh, N. P. Link-motion and expansion gear. *Illus.* sm. 4°. *London*, 1872.

——— Modern marine compound engines; forming a supplement to Modern marine engineering. 4°. *London*, 1873.

——— A practical treatise on the condensation of steam. *Illus.* roy. 8°. *London*, 1871.

——— Modern marine engineering. *Illus.* 4°. *London*, 1872.

——— A practical treatise on modern screw-propulsion. *Illus.* 4°. *London*, 1869.

——— A treatise on sugar machinery, including the process of producing sugar from the cane, refining moist and loaf sugar, designing, manufacturing and erecting the machinery; with rules for proportions and estimates. *Illus.* 4°. *London*, 1863. pp. 64.

Burgoyne, *Sir* John. Rudimentary treatise on the blasting and quarrying of stone for building and other purposes. *Illus.* 12°. *London*, 1849. **Weale's series, No. 35.**

BURIAL-CASES and caskets. *See* Crane, Breed and co.

Burke, Edmund. List of patents issued by the U. S., 1790 to 1847. *See* UNITED STATES. Patent office.

Burke, Peter. The law of international copyright between England and France, in literature, the drama, music, and the fine arts, analysed and explained, with the convention, orders in council, and recent acts of parliament on the subject; in English and French. 12°. *London*, 1852.

Burke, Peter. Treatise on the law of patents and copyright; supplement. *See* Godson, R.

Burke, William. The Virginia mineral springs. 12°. *Richmond, Va.*, 1853.

Burn, Robert. A naval and military technical dictionary of the French language; in two parts: French-English and English-French. 8°. *London*, 1852.

Burn, Robert Scott. Book of farm implements and machines. *See* **Slight,** J.

——— Hand book of the mechanical arts. 8°. *Edinburgh*, 1860.

——— The illustrated London practical geometry, and its application to architectural drawing. 8°. *London*, 1853.

——— Mechanics and mechanism: elementary essays and examples; ed. by. *Illus.* 8°. *London*, 1858.

——— Das Nothwendige und Wesentliche zur Kenntniss der Dampfmaschinen, etc. *Illus.* 8°. *Weimar*, 1855. **224 Neuer Schauplatz der Künste.**

——— Practical ventilation as applied to public, domestic, and agricultural structures, etc. Appendix on ventilation of ships, steamboats and railway carriages. 8°. *Edinburgh*, 1850.

——— The self-aid cyclopædia, for self-taught students: comprising general, architectural, mechanical, engineering and ornamental drawing and design, etc. *Illus.* 8°. *London*, 1863.

——— The steam engine: its history and mechanism. *Illus.* 8°. *London*, 1857.

——— Year book of agricultural facts. 2 v., 1859–60. 12°. *Edinb. and Lond.*, 1860–61.

Burnell, George R. Rudimentary treatise on limes, cements, mortars, concretes, mastics, plastering, etc. 12°. *London*, 1850. **Weale's series, No. 45.**

——— Rudiments of civil and hydraulic engineering. *See* **Law,** H. **Weale's series, No. 13, 14, 15, 15.***

——— The rudiments of hydraulic engineering. Part 1. *Illus.* 12°. *London*, 1858. **Weale's series, No. 120.**

——— Well-digging, boring and pump work; ed. by. *See* **Swindell,** J. G. **Weale's series, No. 31.**

Burnet, John. Landscape painting in oil colours, etc. Re-edited with an appendix by Henry Murray. 4°. *London*, 1861.

——— Practical hints on portrait painting. Re-edited and with an appendix by Henry Murray. 4°. *London*, 1860.

Digitized by Google

Burnett, Charles J. Photographic negative processes on waxed and plain papers and on glass. 8°. *London*, 1859. pp. 16.

BURNETTIZING, or the process for preventing the rapid decay of timber by the use of chloride of zinc. 8°. *Cambridge*, 1856. pp. 23.

Burney, Charles. The present state of music in Germany, the Netherlands and United Provinces, etc.; or the journal of a tour through those countries, undertaken to collect materials for a general history of music. 3 v. 8°. *London*, 1775.

Burney, William. Dictionary of the marine; ed. by. *See* **Falconer,** W.

BURNING GLASS, Description of, made by Mr. Villette. *See* **Description.**

Burr, Fearing, *jr.* The field and garden vegetables of America, containing descriptions of nearly eleven hundred species. 12°. *Boston*, 1865.

Burr, Henry A., et al. vs. G. E. Cowperthwaite. Opinion. *See* **Ingersoll,** C. A.

Burrell, F. A. Asiatic cholera. 12°. *New York*, 1866.

Burrow, Reuben. A restitution of the geometrical treatise of Apollonius Pergæus on inclinations; also theory of gunnery, etc. 4°. *London*, 1779.

Note.—Appended to v. 69 of the Transactions of the Royal society.

Burrowes, Aymas Deane. The modern encyclopædia; or general dictionary of arts, sciences and literature: comprehending the latest discoveries in each department. 10 v. 4°. *London*, 1816.

Burt, W. H. Characteristic materia medica. 8°. *Philadelphia*, 1869.

Burton, John Hill. Cyclopædia of commerce, etc. *See* **Waterston,** W.

Burty, Philippe. Chefs-d'œuvre of the industrial arts, ed. by W. Chaffers. 8°. *New York*, 1869.

——— La gravure, etc., par. *See* **Lagrange,** L. La peinture au salon de 1861.

Bury, T. Talbot. Rudimentary architecture; the history and description of the styles of architecture of various countries. *Illus.* 12°. *London*, 1853. **Weale's series, No. 17.**

Busby, James. Grapes and wine; a visit to the principal vineyards of Spain and France, etc. 12°. *New York*, 1848.

Bushman, J. S., and others. The principles of physiology: the structure of the skeleton and of the teeth: and the varieties of the human race. 8°. *London*, 1854. **Orr's circle of sciences, v. 1.**

Bushnell, Charles I. An arrangement of tradesmen's cards, political tokens, also election medals, medalets, etc. 8°. *New York*, 1858.

BUSINESS man's assistant. *See* **Betts,** I. R.

——— A practical guide to. *See* **Welsh,** Lewis G.

——— A practical treatise on. *See* **Freedley,** E. T.

Busk, George. Natural history review; ed. by. *See* **Natural history.**

——— Quarterly journal of microscopical science, ed. by. *See* **Quarterly.**

Busk, Hans. Hand-book for Hythe: comprising a familiar explanation of the laws of projectiles. *Illus.* 16°. *London* 1860.

——— The rifle, and how to use it. *Illus.* 16°. *London*, 1858.

BUTCHER. Das Fleischerhandwerk. *See* **Thon,** G. P. F. **12 Neuer Schauplatz der Künste.**

Butler, D. P. System of physical training; the lifting cure, etc. roy. 8°. *Boston*, 1868.

Butler, Henry D. The family aquarium, or aqua vivarium. 24°. *New York*, 1866.

Butler, John G. Projectiles and rifled cannon, etc. 4°. *New York*, 1875.

Butler, W. F. Ventilation of buildings. 18°. *New York*, 1873. **Van Nostrand's science series, No. 5.**

BUTTER-BOOK, The practical. *See* **Willard,** X. A.

Buttman, Philip. A Greek grammar for the use of high schools and universities. Transl. from 18th German ed. by E. Robinson. 8°. *New York*, 1851.

Büttner, F. C. A., and **Chertier,** F. M. Die Lustfeuerwerkerei, etc. *Illus.* 8°. *Weimar*, 1846. **92 Neuer Schauplatz der Künste.**

BUTTONS. Die Kunst des Knopfmachers. *See* **Reimann,** F. A. **105 Neuer Schauplatz der Künste.**

Butts, I. R. Business man's assistant. 96th ed. 12°. *Boston*, 1851.

——— The tinman's manual, and builder and mechanic's handbook. 5th. ed. 12°. *Boston*, 1869.

Digitized by Google

Byford, William H. The practice of medicine and surgery, applied to the diseases and accidents incident to women. 8°. *Philadelphia*, 1865.

Byrd, William. The Westover manuscripts: containing the history of the dividing line betwixt Virginia and North Carolina, etc. 8°. *Petersburg*, 1841. Appended to v. 9, Farmer's register.

Byrn, M. Lafayette. The complete practical brewer. *Illus.* 12°. *Philadelphia*, 1852.

——— The complete practical distiller. *Illus.* 12°. *Philadelphia*, 1853. Also ed. 1860.

——— A treatise on the adulteration of food and drink. 12°. *Philadelphia*, 1852.

Byrne, James P. A handy book on the law and practice of patents for inventions, and registration of designs, etc. 16°. *London*, 1860.

Byrne, Oliver. The American engineer, draftsman, and machinist's assistant. 4°. *Philadelphia*, 1853.

——— The calculator's constant companion. 24°. *Philadelphia*, 1854.

——— Cotton spinner and manufacturer, ed. by. *See* **Scott,** R.

——— Dual arithmetic. 8°. *London*, 1864.

——— The handbook for the artisan, mechanic, and engineer. *Illus.* 8°. *Philadelphia*, 1863.

——— The practical metal worker's assistant; with the application of the art of electro-metallurgy to manufacturing processes, etc. *Illus.* 8°. *Philadelphia*, 1851.

——— The practical model calculator, for the engineer, mechanic, etc. 8°. *Philadelphia*, 1863.

Byrom, John. The universal English short hand. 8°. *Manchester*, 1767. pp. 92.

BYZANTINE art. The Byzantine and Romanesque court in the Crystal palace. *See* **Wyatt,** M. D., and **Waring,** J. B. **Crystal palace library, v. 2.**

Cabell, J. L. The testimony of modern science to the unity of mankind; introductory notice by James W. Alexander. 12°. *New York*, 1859.

Cabinet-maker's assistant, The; a series of original designs for modern furniture, with descriptions and details of construction, preceded by practical observations on the materials and manufacture of cabinet-work, and instructions in drawing adapted to the trade. 4°. *Glasgow*, 1853.

Cabinet-maker's companion. *See* **Stokes,** J.

CABINET-making. Art de l'ébéniste. *See* **Nosban. 47 Manuels Roret.**

——— Muster-Sammlung für Bau- und Meubeltischler. *See* **Krug,** E.

——— Tischlerkunst. *See* **Stöckel,** H. F. A. **5 Neuer Schauplatz der Künste.**

CABINET of knowledges, Gale's. *See* **Gale,** J.

Cadet, Chas. Louis. Dictionnaire de chimie, contenant la théorie et la pratique de cette science, son application à l'histoire naturelle et aux arts. T. 1–4. *Paris*, 1803.

CADET Engineer. *See* **Long,** John H., and **Buel,** R. H.

CAEN. Académie impériale des sciences, arts et belles-lettres de Caen. Mémoires, 1851–62. [1853 and 1854 wanting.] 8°. *Caen*, 1851–62.

Cailletet, Cyrille. Essai et dosage des huiles, employées dans la commerce ou servant à l'alimentation; des savons et de la farine de blé. 16°. *Paris*, 1859.

Caird. Agriculture anglaise. Situation économique et agricole, modes de culture des comtés de l'Angleterre. Traduit de l'anglais par M. Baucelin-Dutertre. 8°. *Paris*, 1852.

CALCULATING machine, Description of. *See* **Nystrom,** J. W. Screw propellers.

——— Specimens of tables calculated by machinery. *See* **Specimens.**

CALCULATOR, The foreign and domestic. *See* **Winslow,** E. S.

——— The mechanic's. *See* **Grier,** Wm.

——— The mercantile. *See* **Merry,** W. A.

——— A pocket manual. *See* **Rohrer,** Martin M.

——— The practical model. *See* **Byrne,** O.

——— The Prussian. *See* **Clark,** T. A.

——— The ready. *See* **Stafford,** H. N.

CALCULATOR'S constant companion. *See* **Byrne,** O.

CALCULUS, The differential. *See* **Spare,** John.

——— The differential and integral. *See* **De Morgan,** Augustus.

——— The differential and integral. *See* **Lardner,** Dionysius.

——— The differential and integral, Elements of. *See* **Smyth,** William.

——— Elements of. *See* **Church,** Albert E.

——— Elements of differential. *See* **Woolhouse,** W. S. B. **Weale's series, No. 101.**

Digitized by Google

CALCULUS, Examples in the differential. *See* **Haddon, J. Weale's series, No. 104.**

——— Examples of integral. *See* **Hann, J. Weale's series, No. 103.**

——— of operations, The. *See* **Paterson, John.**

——— A treatise on the. *See* **Courtenay, Edward H.**

——— Treatise on the integral. *See* **Cox, H. Weale's series, No. 102.**

CALCUTTA. East India company's botanic gardens, Report on. By authority. Parts 1-7. fol. *Calcutta*, 1843. *Also*, N. Wallich's report, Dec. 21, 1840.

——— Public library, Catalogue of. 8°. *Calcutta*, 1846.

——— Public library, Report on. 1848-49. 8°. *Calcutta*, 1849. pp. 13.

CALENDAR. Kalender und statistisches Jahrbuch für das Königreich Sachsen. *See* SAXONY.

CALENDARS, Christian, Hebrew, and Mahomedan. *See* **Woolhouse, W. S. B.**

CALICO printing. **Abridgments English Patents, No. 14.**

——— Chemistry of. *See* **O'Neill, C.**

——— Fortschritte in dem Zeugdruck. *See* **Frohwein, F.**

——— Handbuch der Kattunfabrikation. *See* **Geest, F. W. 139 Neuer Schauplatz der Künste.**

——— Handbuch des Zeugdrucks. *See* **Persoz, J. F. 162, 163 Neuer Schauplatz der Künste.**

——— Lehrbuch der Färberei, nebst einem Anhange über Kattun-Druckerei. *See* **Vitalis, J. B. 6 Neuer Schauplatz der Künste.**

——— Manuel du fabricant d'étoffes imprimées. *See* **Le Normand, L. S. 103 Manuels Roret.**

——— Recent improvements and progress in. *See* **Calvert, F. C.**

——— Der Rothpapp- und Dampffarbendruck. *See* **Diedtmann, J. A. 225 Neuer Schauplatz der Künste.**

——— State of, in Belgium, Germany and the states of the Prussian commercial league. *See* **Tennent, J. E. Copyright** of designs.

——— Traité de l'impression des tissus. *See* **Persoz.**

CALICOES. Manuel du fabricant d'indiennes. *See* **Thillaye, L. J. S. 77 Manuels Roret.**

CALIFORNIA. First biennial report of the superintendent of public instruction; 1864-65. 8°. *San Francisco*, 1865.

——— Medical companion; a concise manual of the diseases incident to that climate, by a physician of this city. 18°. *New York*, 1849. pp. 24.

——— Plantæ Fremontianæ, by J. Torrey. **Smiths'n contrib., v. 6.**

——— What I saw in. *See* **Bryant, E.**

Calkins, Marshall, and **Newton,** Calvin. Thoracic diseases, pathology, diagnosis and treatment. 2d ed. roy. 8°. *Philadelphia*, 1858.

Callan, John F. The military laws of the U. S., relating to the army, volunteers, militia, bounty lands, and pensions, from the foundation of the government to 1863. 8°. *Philadelphia*, 1863.

Callendine, George V. The geometrical regulator, or circular transfer; a scientific guide for draughting, balancing and cutting pantaloons. 3d ed. 8°. *New York*, 1849. pp. 23.

Callicot, T. Carey. Handbook of universal geography: a gazetteer of the world. 12°. *New York*, 1853. **Putnam's** home cyclopædia.

Callon, M. J. Cours professés à l'école des mines de Paris. Part 1. Cours de machines, 2 v., texte et atlas. Part 2. Cours d'exploitation des mines, texte et atlas. 8° and 4°. *Paris*, 1873.

CALORIC, its agencies in nature. *See* **Metcalf, S. L.**

——— ship Ericsson. *See* **Ericsson, J.**

CALOTYPE. The calotype process. *See* **Sutton, T.**

——— Process of. *See* **Humphrey, S. D.**

Calvert, F. Crace. Lectures on coal tar colors and recent improvements and progress in dyeing and calico printing 8°. *Manchester, n. d.* pp. 64.

Calwer, C. G. Deutschlands technische Pflanzen für das praktische Bedürfniss dargestellt. 4°. *Stuttgart*, 1854.

CAMBIST, The American. *See* **Tosswill, Edward B.**

——— The universal cambist and commercial instructor. *See* **Kelly, P.**

CAMDEN, N. J. Directory, 1855. *See* **McElroy, A. Philadelphia** directory.

Camp, David N. The American year-book and national register for 1869; ed. by. 8°. *Hartford*, 1869.

Digitized by Google

Campbell, Gabriel. A new elementary course in the German language, for schools. 2d ed. 12°. *Chicago*, 1867.

Campbell, Henry Fraser. Essay on the secretory and the excito-secretory system of nerves, in their relations to physiology and pathology. roy. 8°. *Philadelphia*, 1857.

Campbell, J. F. Frost and fire; natural engines, tool-marks and chips, with sketches taken at home and abroad, by a traveller. 2 v. *Edinburgh*, 1865.

Campbell, J. L. Idaho and Montana gold regions; emigrant's guide overland. 8°. *Chicago*, 1865.

Camper, Peter. Best form of shoe. *See* **Dowie,** J.

Campin, Francis. A practical treatise on mechanical engineering, comprising metallurgy, moulding, casting, forging, tools, workshop machinery, mechanical manipulation, manufacture of the steam engine; an appendix on the analysis of iron and iron ores; to which are added, observations on the construction of steam-boilers, remarks on furnaces used for smoke prevention and explosions, by Robert Armstrong; revised, with notes, by John Bourne; rules for calculating the change wheels for screws on a turning lathe, and a wheel cutting machine, by J. La Nicca; the management of steel, including forging, hardening, tempering, annealing, shrinking, expansion, and the casehardening of iron; by George Ede. *Illus.* 8°. *Philadelphia*, 1864.

——— The practice of hand turning in wood, ivory, shell, etc.; instructions in turning such works in metal as may be required in wood turning, ivory, etc.; an appendix on ornamental turning. 8°. *London*, 1861. Same, 2d ed., 1868.

——— A treatise on the application of iron to the construction of bridges, girders, roofs, and other works. 18°. *London*, 1871.

Camus, Charles Etienne Louis. A treatise on the teeth of wheels; demonstrating the best forms which can be given to them for the purposes of machinery, such as mill and clock work, and the art of finding their numbers. Transl. from French of Camus by J. I. Hawkins. *Illus.* 8°. *London*, 1842.

Camus, M^tel. L'art de tremper les fers et les aciers. 8°. *Rouroi*, 1846.

CANADA. Board of arts and manufactures for Upper Canada, The journal of, ed. by Henry Youle Hind. 7 v. 8°. *Toronto*, 1861–67.

——— Canadian patent office record. Published monthly. v. 1–4. 8°. *Ottawa*, 1873–76 ——.

——— Canadian Red river expedition of 1857. *See* **Hind,** Henry Youle.

——— Education. Report of the superintendent for Lower Canada, 1850–56. 5 v. 8°. *Quebec, Toronto*, 1852–57.

——— Geological observations on. *See* **Lyell,** *Sir* C. **Travels** in North America.

——— Great western railway, Reports of commissioners appointed to inquire into accidents and detentions on. 8°. *Quebec*, 1855.

——— Legislative assembly, Return to an address of, requiring copies of any charters, leases, or other documents, under which the Hudson's bay company claim title to the Hudson's bay territory. 8°. *Toronto*, 1857.

——— Patent office, Rules, regulations, and forms of. 8°. *Ottawa*, 1872.

——— Patentee's manual; showing the manner of securing inventions by letters patent in Canada and foreign countries. 8°. *Montreal*, 1872.

——— Patents of. v. 1, 1824–49; v. 2, 1849–55. 8°. *Toronto*, 1860–65.

——— Postmaster general's report for 1856. 8°. *Toronto*, 1857.

——— Public accounts for the province of Canada for the year 1856. 8°. *Toronto*, 1857.

——— Schools in Upper Canada. Annual report of the normal, model, grammar, and common schools for 1855. 8°. *Toronto*, 1856.

——— Schools in Lower Canada. Extracts from statistical tables, by inspectors of primary schools for 1854. *Montreal.* 1 sheet.

——— Trade and navigation of the province for 1854–56; tables compiled from official returns. 3 v. 8°. *Toronto, Quebec*, 1855–57.

Canadian journal (The) of industry, science and art, by the editing committee of the Canadian Institute. 16 v. 4° and 8°. *Toronto*, 1853–73.

CANAL engineering. *See* **Stevenson,** D.

CANALS, Cases relating to. *See* **Nicholl,** T. J., and others.

Digitized by Google

CANALS, Essay on navigable. *See* **Frisi, P. Weale's series, Nos. 121, 122.**

——Girard'sche Schiffschleuse mit Schwimmer. *See* **Poncelet, J. V.**

—— History of the R. R's and canals of the U. S. *See* **Poor, H. V.**

—— Improvement of canal navigation. *See* **Fulton, R.**

—— Die innern Communicationen der Vereinigten Staaten. *See* **Gerstner, F. A. von.**

—— Reports on. *See* **Strickland, W.**

—— Report on the, of N. Y. *See* NEW YORK.

—— Tools and machines used in constructing. *See* **Cole, G.**

—— Voies de communication aux États-Unis. *See* **Chevalier, M.**

CANARY birds. *See* **New** and complete canary-bird fancier.

Canaval, J. L. Jahrbuch des naturhistorischen Landesmuseums, hrsg. v. *See* KLAGENFURT.

CANCER, Two cases of. *See* UNITED STATES. **War** Department.

Candid and impartial considerations on the nature of the sugar trade; the comparative importance of the British and French islands in the West Indies, etc. *Illus.* 8°. *London*, 1763.

CANDLE manufacture. Die Kerzenfabrication. *See* **Schmidt, C. H. 195 Neuer Schauplatz der Künste.**

CANDLES. L'art de fabriquer la chandelle. *See* **Michel. Encyclopédie populaire, v. 15.**

—— Chemistry applied to manufacture of. *See* **Morfit, C.**

—— Kunst des Lichtziehens. *See* **Kunst** des Seifensiedens. **4 Neuer Schauplatz der Künste.**

—— Manuel du chandelier. *See* **Le Normand, L. S. 64 Manuels Roret.**

—— Manufactures of Price's patent candle co. *See* **Wilson, G. F.**

—— Patents for. **Abridgments English Patents, No. 27.**

—— Recipes for making transparent candles and camphene oil. *See* **Kurten, P.**

CANDLESTICKS. Abridgments English Patents, No. 44.

Canniff, William. A manual of the principles of surgery for students. 8°. *Philadelphia*, 1866.

CANNON. Canons rayés; systèmes Armstrong & Whitworth. *See* **Buchwalder, E.**

CANNON. Canons rayés; systèmes Cavalli et Armstrong. *See* **Adts, N.**

—— Les canons rayés en hélice. *See* **Leroy d'Étiolles, J. J. J.**

—— Dissertation on. *See* **Tousard, L. de. Artillerist's companion.**

—— Properties of metals for, and qualities of cannon powder. *See* **Rodman, T. J.**

—— Rifled. Expériences sur les effets de canons de 4 rayés de campagne. *See* **Schmoelzl, J.**

—— Strength, and other properties of metals for. *See* UNITED STATES. **War** department.

Canons rayés (Des) en Belgique; notes et critiques sur la transformation de l'artillerie, et sur les expériences qui ont été faites à Juliers en Septembre 1860. 8°. *Paris*, 1861.

Canton, Alfred. The teeth, their preservation in infancy and manhood, to old age. 18°. *London*, 1851.

Cantu, César. Histoire de cent ans, de 1750–1850. Traduit de l'italien, avec notes et observations, par Amédée Rénée. 3 v. 12°. *Paris*, 1852.

CAOUTCHOUC. Abridgments English Patents, No. 16.

—— Electrical character of. *See* **Johnson, W. R.**

—— Der Fabricant von Kautschuk-Waaren. *See* **Schmidt, C. H. 227 Neuer Schauplatz der Künste.**

—— Origin and progress of the manufacture in England. *See* **Hancock, T.**

CARBOLIC acid, Proving of. *See* **Bacmeister, T.**

CARBON process. Swan's patent. *See* **Simpson, G. Wharton.**

CARD-cases. Abridgments English Patents, No, 43.

—— making. Art du cartier, par H. L. Duhamel du Monceau. PARIS. **Acad. des sc., arts et métiers, v. 23 and 4.**

—— making. Manuel du cartier. *See* **Lebrun. 85 Manuels Roret.**

—— player, The American. *See* **American** card player.

Cardan, Jerome, Life of. *See* **Morley, Henry.**

Cardelli, —. Manuel du cuisinier et de la cuisinière; précédé d'un traité pour bien découper; terminé par un traité sur les vins. 10e éd. *Illus.* 18°. *Paris*, 1836. **82 Manuels Roret.**

—— Manuel du limonadier et du confiseur; 6e éd., entièrement refondue et considéra-

Digitized by Google

Cardelli—Continued.

blement augmentée, par M. J. Lionnet-Clémandot. *Illus.* 18°. Paris, 1835. **59 Manuels Roret.**

CARDING and spinning master's assistant. *See* **Cotton** spinning, theory and practice.

Carey, George G. The artisan or mechanic's instructor; containing a popular, comprehensive and systematic view of the most useful sciences, with biographical notices of eminent scientific men; ed. by. 2 v. in 1. 8°. *London,* 1825.

——— A complete system of theoretical and mercantile arithmetic. 8°. *London,* 1818.

Carey, Henry C. The French and American tariffs compared. 8°. *Philadelphia,* 1861. pp. 29.

——— Principles of social science. 3 v. 8°. *Philadelphia,* 1858–60.

CARICATURES, Rules for drawing. *See* **Grose,** Francis.

CARINTHIA. Zeitschrift für Vaterlandskunde, Belehrung und Unterhaltung. Jahrg. 58–60. 8°. *Klagenfurt,* 1868–70.

Carl, Philipp. Die Principien der astronomischen Instrumentenkunde. *Illus.* 8°. *Leipzig,* 1863.

——— Repertorium für physikalische Technik für mathematische und astronomische Instrumentenkunde. 8°. *München,* 1866–76——.

Note.—From B. 4, 1868, the words *für Experimental-Physik* follow *Repertorium.*

CARLSRUHE. Bewegungs-Mechanismen: Maschinen-Modell-Sammlungen der polytechnischen Schule. *See* **Redtenbacher,** F.

——— Die Eisenbahnbauten bei Kehl Rhein-Brücke, Bahnhof, Kinzig und Schutter-Brücken; gezeichnet durch die Eleven des III. Curses d. grossh. badischen Ingenieur-Schule. obl. fol. *Carlsruhe,* 1859–60.

——— Sammlung ausgeführter Constructionen aus dem Gebiete des Wasser-Strassen- und Eisenbahnbaues. 2te Folge, 1862–63. obl. fol. *Carlsruhe, n. d.*

Carnall, R. von. Zeitschrift für das Berg-Hütten- und Salinenwesen; hrsg. von. *See* PRUSSIA.

Carnot, Lazare Nicolas Marguerite, Biography of. *See* **Arago,** D. F. J. **Biography** of scientific men.

Carpenter, P. P. List of shells of North America. **Smiths'n misc. coll., v. 2.**

Carpenter, Philip. Elements of zoölogy; a concise account of the animal kingdom according to the system of Linnæus. 16°. *London,* 1823.

Carpenter, William. The angler's assistant: comprising practical directions for bottom fishing, trolling, etc. 16°. *London,* 1848.

Carpenter, William Benjamin. Correlation and conservation of forces: by Prof. Grove and others. *See* **Grove,** Wm. Robert.

——— Mechanical philosophy, horology, and astronomy: an exposition of the properties of matter and of their mode of action: the construction of instruments for measurement of time; and a description of the heavenly bodies. 8°. *London,* 1844.

——— The microscope and its revelations. *Illus.* 16°. *London,* 1856. Same. *Illus.* 1857.

——— Natural history review; ed. by. *See* **Natural** history.

——— Principles of human physiology; with their chief application to psychology, pathology, therapeutics, hygiene, and forensic medicine. Amer. edition; ed. by F. G. Smith. 8°. *Philadelphia,* 1855.

——— The temperature and life of the deep sea. **Science lectures for the people, series 2.**

CARPENTER and joiner, The practical. *See* **Riddell,** Robert.

CARPENTERS' and builders' guide. *See* **Plumer,** Peter W.

——— and joiners' handbook. *See* **Holly,** H. W.

——— assistant. *See* **Brown,** William.

——— new guide, The. *See* **Nicholson,** Peter.

——— rule, The. *See* **Marquart,** John.

Carpentier, L. J. M. Dictionnaire des origines, inventions et découvertes. *See* **Noel,** F. J.

CARPENTRY: a comprehensive guide book for carpentry and joinery: with elementary rules for the drawing of architecture in perspective and by geometrical rule; with plans, elevations, sections, etc. 2 v. 4°. *London,* 1852.

——— Designs in. *See* **Swan,** Abraham.

——— Details of ancient timber houses, 15th and 16th centuries. *See* **Pugin,** A. W.

——— Explanation of terms used in. *See* **Nicholas,** Peter. **Mechanic's** companion.

Digitized by Google

CARPENTRY. Guide book for. *See* **Nicholson, P.**

——— Handbuch für Zimmerleute. *See* **Matthaey, C. L. 47–49 Neuer Schauplatz der Künste.**

——— Holzverbindungen. *See* **Rössler, H.**

——— Journal de menuiserie. *See* **Journal.**

——— made easy. *See* **Bell, William E.**

——— Manuel du charpentier. *See* **Hanus, P. A., and Biston, V. 76 Manuels Roret.**

——— Manuel du menuisier. *See* **Nosban. 47 Manuels Roret.**

——— Modern. *See* **Silloway, Thomas W.**

——— Muster-Sammlung für Zimmerleute. *See* **Dempp, C. W.**

——— Principles of. *See* **Tredgold, T.**

——— A specimen of ancient. *See* **Smith, James.**

——— Traité de l'art de la charpenterie. *See* **Emy, A. R.**

——— Treatise on. *See* **Robison, J., and Tredgold, T. Weale's series, No. 123.**

CARPETS. Art de faire les tapis, façon de Turquie, par H. L. Duhamel du Monceau. PARIS. **Acad. des sc., arts et métiers, v. 30; also v. 7.**

Carpmael, William. Law reports of patent cases, v. 1–2. 8°. *London*, 1843–51.

——— The law of patents for inventions familiarly explained. 8°. *London*, 3d ed., 1842; 4th ed., 1846; 5th ed., 1852.

Carriage builders' and harness makers' art journal. v. 1–4. 4°. *London*, 1859–62.

Note.—This set contains illustrated record of the International exhibition, 1862.

CARRIAGE making. Handbuch des Chaisenfabrikanten. *See* **Beckmann, L. 65 Neuer Schauplatz der Künste.**

——— Manuel du carrossier. *See* **Lebrun. 33 Manuels Roret.**

——— Musterzeichnungen von Wagnerarbeiten. *See* HESSE-DARMSTADT.

——— Zeitschrift für Chaisenfabrikanten. *See* **Voigt, B. F.**

CARRIAGES and harness. *See* **Felton, W.**

——— and other vehicles for railways. **Abridgments English Patents, No. 46.**

——— Architecture en voitures. *See* **Guillon.**

——— English pleasure. *See* **Adams, W. B.**

——— Tirage des voitures. *See* **Morin, A.**

——— Treatise on. *See* **Tredgold, T.**

Carrow, John Monson. Cases relating to railways and canals. *See* **Nicholl, T. I., and others.**

CARS. Abridgments English Patents, No. 46.

Carson, Joseph. American journal of pharmacy; ed. by. *See* **American.**

——— Elements of materia medica; ed. by. *See* **Pereira, J.**

——— History of the medical department of University of Pennsylvania, from its foundation in 1765, with sketches of the lives of deceased professors. roy. 8°. *Philadelphia*, 1869.

——— Synopsis of the course of lectures on materia medica and pharmacy delivered in the University of Pennsylvania. 8°. *Philadelphia*, 1851.

Carstairs. Manuel de calligraphie; méthode de; traduit par M. Tremery. 18°. *Paris, n. d.* **111 Manuels Roret.**

Carstensen, George, and **Gildemeister,** Charles. New York crystal palace; illustrated description of the building. sm. 4°. *New York*, 1854. pp. 76.

CARTE DE VISITE. Photograph manual; carte de visite process. *See* **Burgess, N. G.**

Cartée, Cornelius S. Elements of map-drawing; with plans for sketching maps by triangulation, and improved methods of projection; designed for schools and academies. small long 4°. *Boston*, 1859. pp. 22.

——— First lessons in philosophy, or the science of familiar things. 12°. *Boston*, 1856.

Carter, Thomas. Curiosities of war and military studies; anecdotal, descriptive and statistical. 16°. *London*, 1760.

Carteron, Édouard. Complément de l'encyclopédie moderne. *See* **Courtin, E. M. Encyclopédie moderne.**

Carver, Jonathan. Travels in Wisconsin. From 3d London ed. 8°. *New York*, 1838.

CARVING. Manual of wood-carving. *See* **Bemrose, William.**

Casella, Louis P., An illustrated and descriptive catalogue of philosophical, meteorological, mathematical, surveying, optical and photographic instruments, manufactured by. 8°. *London*, 1860.

Casey, Silas. Infantry tactics. 3 v. 24°. *New York*, 1862.

Cassell's illustrated family paper exhibitor, containing about 300 illustrations, with letter-press descriptions of all the principal objects of the international exhibition of 1862. 4°. *London*, 1862.

Digitized by Google

CAST-iron, The strength of. *See* **Tredgold**, Thomas.

Castellan, A. L. Turkey: a description of the manners, customs, dresses, and other peculiarities characteristic of the inhabitants of the Turkish empire. Transl. by Fr. Shoberl. 3 v. 18°. *Philadelphia*, 1829.

CASTING. Manuel du fondeur. *See* **Launay**, J. B. **39 Manuels Roret.**

Castle, Henry James. Engineering field-notes on parish and railway surveying and levelling, with plans and sections; formulæ for the calculation of earth work, theory and practice of running out curves, putting down sidestakes, etc. 2d ed. 8°. *London*, 1847.

Castlemain, *Earl of*. The English globe; being a stabil and immobil one, performing what the ordinary globes do, and much more. 2d ed., corrected by J. Moxon. sm. 4°. *London*, 1696.

Castor, A. Travaux de navigation et de chemins de fer; recueil d'appareils à vapeur employés dans ces constructions. Précédé d'un rapport sur les travaux de fondation du pont du Rhin, par M. Baude. Texte, 8°; planches, fol. *Paris*, 1861.

Castro, Manuel Fernandez de. L'électricité et les chemins de fer, description et examen de tous les systèmes proposés pour éviter les accidents sur les chemins de fer au moyen d'électricité. T. 1-2. 8°. *Paris*, 1859.

Caswell, Alexis. Meteorological observations at Providence, R. I. 1831-60. **Smiths'n contrib., v. 12.**

CATACOMBS of Rome, The. *See* **Kip**, Willam Ingraham.

CATALOGUE, Alphabetical, of the library of the department of the interior. *See* UNITED STATES. **Interior** department.

——— American, of books published in the United States from 1861 to 1866. *See* **Kelly**, James.

——— Catalogue annuel de la librairie française. *See* **Reinwald**, Ch.

——— Catalogue méthodique de la bibliothèque communale de la ville d'Amiens. *See* AMIENS.

——— Catalogus der Bibliotheek van het Bataviaasch genootschap van kunsten en wetenschappen. *See* BATAVIA. East Indies.

——— Catalogus der ethnologische afdeeling van het museum van het Bataviaasch genootschap van kunsten en wetenschappen. *See* BATAVIA. East Indies.

CATALOGUE—Continued.

——— Index of books in the public library. *See* BOSTON.

——— Katalog der Bibliothek der K. Rheinisch-Westphälischen Polytechnischen Schule zu Aachen. *See* AACHEN.

——— of the Alexandria library, founded 1794. 8°. *Washington*, 1856.

——— of the Arkansas industrial university for 1872-73. *See* ARKANSAS.

——— of the Astor library, 1859. *See* NEW YORK (city).

——— of the books in the library of the Philadelphia library company. *See* PHILADELPHIA.

——— of books and maps, published in Germany. *See* **Westermann**, B., & co.

——— of the British section, of the Paris exhibition of 1867. *See* PARIS.

——— of the Dublin international exhibition of 1865. *See* DUBLIN.

——— of the library of congress. *See* UNITED STATES.

——— of the library of the public schools of St. Louis. *See* ST. LOUIS.

——— of the library of the surgeon general's office. *See* UNITED STATES. **War** Department.

——— of the library of the university of Vermont. *See* VERMONT.

——— of the library of the Young men's association. *See* MILWAUKEE.

——— of the McBride library and cabinet. *See* **McBride**, J.

——— of scientific papers. *See* LONDON. **Royal** society.

——— of works of note published in France in 1870-1871. *See* **Bossange's** literary annual.

CATALOGUES. *See* **Bibliography**.

——— Construction of. *See* **Jewett**, C. C.

CATANIA. Atti dell'Accademia Gioenia di scienze naturali di. 4 v. 4° and fol. *Catania*, 1868-73.

Catechism of photography, A. 16°. *London*, 1859. pp. 97.

——— of the steam-engine. *See* **Roper**, Stephen.

Cates, William L. R. A dictionary of general biography, with a classified and chronological index of the principal names. 2d ed. with supplement to date. 8°. *London*, 1875.

Digitized by Google

CATTLE, Abbildungen der Rindviehracen und Schläge der Schweiz. *See* **Adam,** Benno.

——— Abbildungen österreichischer Rindvieh-Racen. *See* AUSTRIA.

——— American. *See* **Allen,** Lewis F.

——— Breeds, management and diseases. *See* **Youatt,** W., and **Martin,** W. C. L.

——— Diseases of, in the United States. *See* UNITED STATES. **Department** of agriculture.

——— doctor, Every man his own. *See* **Clater,** Francis.

——— Die Einrichtungen der Viehmärkte und Schlachthäuser in den Hauptstädten Europa's. *See* **Wenzel,** Franz.

——— Holländische Rindviehzucht. *See* **Ellerbrock,** I. J.

——— Manuel de l'éleveur de bêtes à cornes. *See* **Villeroy,** F.

——— Notes sur l'élevage du bétail. *See* Notes.

——— plague. *See* **Gamgee,** John.

——— Rindvieh - Stämme Württembergs. *See* **Rindvieh-Stämme,** etc.

——— Traité des bêtes bovines. *See* **Weckherlin,** de.

——— Wochenschrift für Thierheilkunde und Viehzucht. *See* **Wochenschrift.**

CAUSATION and freedom in willing. *See* **Hazard,** Rowland G.

Cauvin, Joseph. Dictionary of science; ed. by. *See* **Brande,** W. T.

——— Dictionary of science, literature, and art. *See* **Brande,** W. T., and **Cauvin,** J.

Cavalli. Canons rayés, systèmes Cavalli et Armstrong. *See* **Adts,** N.

Cavallo, Tiberius. A complete treatise on electricity in theory and practice, with original experiments. 4th ed. 3 v. 8°. *London,* 1795.

——— The elements of natural or experimental philosophy. 4 v. 8°. *London,* 1803.

——— An essay on the medicinal properties of factitious airs. 8°. *London,* 1798.

CAVALRY, its history, management, and uses in war. *See* **Roemer,** J.

——— Mémoire sur les armes à feu rayées de la cavalerie, et observations sur l'instruction de ces troupes, etc. *See* **Thiroux.**

Cavé, *Madame* Marie Elizabeth. Drawing without a master; the Cavé method of learning to draw from memory. 12°. *New York,* 1868.

CAVE men of Devonshire, The time which has elapsed since the era of the. Part 2. **Science lectures for the people, series 7.**

CAVENDISH and his discoveries. **Science lectures for the people, series 7.**

Cavendish Society, Publications of. viz:

Atlas of physiological chemistry. 1 v. O. Funke.
Chemical method, etc. 1 v. A. Laurent.
Elements of geology. 3 v. K. G. Bischof.
Handbook of chemistry. 14 v. L. Gmelin.
Memoir of J. Dalton. 1 v. W. C. Henry.
Physiological chemistry. 3 v. K. G. Lehmann.

8° and 4°. *London,* 1851–66.

Cawse, John. The art of painting portraits, landscapes, animals, draperies, satins, etc., in oil colours; with appendix on cleaning and restoring ancient paintings on panel or canvas. 8°. *London,* 1840. pp. 48.

Cazeaux, P. A theoretical and practical treatise on midwifery. Transl. from 2d French ed. by Robert P. Thomas. 8°. *Philadelphia,* 1850.

——— A theoretical and practical treatise on midwifery. Transl. by Wm. R. Bullock. 2d Am. from 5th French ed. 8°. *Philadelphia,* 1857.

Cazin, Achille. The phenomena and laws of heat. Transl. and ed. by Elihu Rich. 16°. *London,* 1868.

CELESTIAL objects. *See* **Webb,** T. W.

——— planispheres, Construction of. *See* **Oxley,** Thomas.

CELLARIST. Die Kellereiwirthschaft. *See* **Schmidt,** C. H. **194 Neuer Schauplatz der Künste.**

Celnart, *Mme.* Manuel du charcutier; rédigé par. 18°. *Paris,* 1827. **55 Manuels Roret.**

——— Manuel complet d'économie domestique; par. *Illus.* 2e éd. 18°. *Paris,* 1829. **117 Manuels Roret.**

——— Manuel du fleuriste artificiel; suivi de l'art du plumassier. *Illus.* 18°. *Paris,* 1829. **88 Manuels Roret.**

——— Manuel des habitans de la campagne, etc. *See* **Gacon-Dufour,** *Mme.* **69 Manuels Roret.**

——— Manuel du parfumeur; renouvelé par. **78 Manuels Roret.**

CEMENTS. Englisches Receptbuch für Cementirer. *See* **Reinnel,** F. **35 Neuer Schauplatz der Künste.**

Digitized by Google

CEMENTS. Fortschritte in der Cementfabrication. *See* **Vicat, E. 3 Neuer Schauplatz der Künste.**

——— Improving the art of composing and applying calcareous. *See* **Higgins,** Bry.

——— Die Kitt-Kunst. *See* **Thon, C. F. G. 136 Neuer Schauplatz der Künste.**

——— Observations on calcareous. *See* **Pasley, C. W.**

——— Practische Anleitung zur Anwendung der Cemente. *See* **Becker, W. A.**

——— Treatise on. *See* **Burnell, G. R.**

——— Treatise on. *See* **Vicat, L. J.**

——— Zement, in seiner Verwendung im Hochbau und der Bau mit Zement-Béton, etc. *See* **Liebold, B.**

Cennini, Cennino, A treatise on painting written by, in the year 1437. Transl. by Mrs. Merrifield. 8°. *London*, 1844.

CENSUS of the Canadas. *See* CANADA.

——— of the United States. The 8th census, for 1860. The 9th census, for 1870, etc. *See* UNITED STATES. **Department** of the interior.

——— of Vienna. Die Bevölkerung von Wien und seiner Umgebung nach dem Berufe und der Beschäftigung. *See* AUSTRIA.

CENTRAL AMERICA, The states of. *See* **Squier, E. G.**

Central-Blatt für deutsche Papierfabrikation. Alphabetisches Register. B. 1–10, 1850–59. 8°. *Dresden*, 1862. pp. 31.

——— für deutsche Papierfabrikation. Herausgegeben von Alwin Rudel. 8°. B. 1–21. *Dresden. Halle a. d. Saale*, 1850–76——.

——— für die gesammte Landeskultur. *See* PRAGUE.

CENTRAL park, of New York; annual reports of the commissioners. *See* NEW YORK.

CENTURY of inventions. *See* **Thousand** notable things, A.

CERAMIC art, History of. *See* **Jacquemart, Albert.**

——— art at the international exhibition. *Vienna*, 1875. *See* **Blake,** William P.

——— arts: Leçons de céramique. *See* **Salvelat, A.**

Cerfberr, Alphonse. De l'état actuel de la métallurgie en Europe. 8°. *Paris*, 1858.

CESTOIDES, Human. *See* **Weinland, D. F.**

CEYLON, Eleven years in. *See* **Forbes,** *Maj.*

Chadwick, Henry. The base-ball player's book of reference; containing the revised rules of the game for 1867. 24°. *New York*, 1867.

Chaffers, William. The collector's hand book of marks and monograms on pottery and porcelain, of the renaissance and modern periods. 12°. *London*, 1874.

CHAIN navigation. Einführung der Ketten-Schifffahrt auf dem Neckar. *See* **Wüst, C.**

CHALCOGRAPHY: the art of engraving in copper. *See* **Evelyn,** John.

CHALDEE language, A manual of. *See* **Riggs,** Elias.

Challan, Antoine Didier Jean Baptiste, **De Chassiron, De Lasteyrie, Yvart,** and **De Perthius.** Société royale et centrale d'agriculture. Concours pour les machines hydrauliques appropriées aux usages de l'agriculture et aux besoins des arts economiques. 8°. *Paris*, 1818. pp. 51.

Chalmers, James. Naval armor. 8°. *London*, 1865. pp. 96.

Chalmers, Thomas. On the power, wisdom, and goodness of God, as manifested in the adaptation of external nature to the moral and intellectual constitution of man. 12°. *Philadelphia*, 1833.

Chamberlain, N. B. and D. A catalogue of pneumatic instruments, manufactured and sold by; with experiments. *Illus.* 8°. *Boston*, 1844.

Chambers, George F. Descriptive astronomy: Clarendon press series. 8°. *Oxford*, 1867.

Chambers, Robert. The book of days; a miscellany of popular antiquities in connection with the calendar; including anecdote, biography and history, curiosities of literature and oddities of human life and character. 2 v. 8°. *Edinburgh*, 1863.

——— Chambers's miscellany of useful and entertaining knowledge. v. 1–10. 8°. *Boston, n. d.*

Chambers, William and Robert. Elements of natural philosophy, in 3 parts, viz: 1. Laws of matter and motion. 2. Mechanics. 3. Hydrostatics, hydraulics and pneumatics. Ed. by D. M. Reese. 12°. *New York*, 1849.

——— Chambers's encyclopædia; a dictionary of universal knowledge for the peo-

Digitized by Google

Chambers, W. and R.—Continued.
ple. 10 v., with supplement. *Illus.* 8°. *Philadelphia*, 1861-64. Same, revised ed., 1874.

Chambers' useful hand-books. 1. Croquet; to which is added troco, or lawn billiards. 2. Gymnastics, golf, curling. 3. Cricket; its theory and practice. 3 v. 24°. *London and Edinburgh, n. d.*

CHAMOIS dressing. Art du chamoiseur, par de la Lande. PARIS. **Acad. des sc., arts et métiers, v. 38; also 3.**

CHAMPAGNE country, The. *See* **Tomes,** Robert.

Champomier, P. A. Statement of the sugar crop made in Louisiana in the years 1849-58. 9 pamphlets. *New Orleans*, 1850-58.

CHANCES to make money, A thousand. *See* **Freedley,** E. T.

CHANDELIERS. Abridgments English Patents, No. 44.

Chandler, C. F. Report on petroleum as an illuminator, and the advantages and perils which attend its use; with special reference to the prevention of the traffic in dangerous kerosene and naphtha. 8°. *New York*, 1871.

Chandler, Charles F. and W. H. The American chemist; a monthly journal of theoretical, analytical and technical chemistry. v. 1-6. sm. 4°. *New York*, 1871-76——.

Channing, Walter. Six cases of inhalation of ether in labor. 8°. *Boston*, 1847. pp. 35.

Channing, William F. Notes on the medical application of electr city. 12°. *Boston*, 1849.

Chapman, Frederik Heinrich von. Construction des vaisseaux PARIS. **Acad. des sc., arts et métiers, v. 45.**

Chapman, J. G. The American drawing book: a manual for the amateur, and basis of study for the professional artist. 8°. *New York*, 1870.

Chapman, John Ratcliffe. Instructions to young marksmen. 12°. *New York*, 1848.

Chapman, L. L. Principia, or nature's first principles; theory of universal electro-magnetism simplified. v. 1. 12°. *Philadelphia*, 1855.

Chapman, Robert. A treatise on rope-making; with a description of the manufacture, rules, tables of weights, etc. 16°. *London*, 1858. pp. 98.

Chapman, William, Memoir of. **Weale's papers on engineering, v. 1.**

Chappelsmith, John. Account of a tornado near New Harmony, Ind., April 30, 1852. **Smiths'n contrib., v. 7.**

Chaptal, Jean Antoine, *Comte de Chanteloup.* Chemistry applied to agriculture. Transl. from 2d French ed. 12°. *Boston*, 1836.

—— Chimie appliquée aux arts. 4 v. 8°. *Paris*, 1807.

CHARCOAL. Manuel des marchands de charbons. *See* **Marie de l'Isle,** E. B. **62 Manuels Roret.**

—— burner. Art du charbonnier par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sc., arts et métiers, v. 1 and 2.**

CHARITABLE institutions. Statistica del regno d'Italia. *See* ITALY.

CHARLESTON. Operations against the defences of Charleston harbor. *See* **Gillmore,** Quincy A.

—— and Savannah R. R. 1st report of the president to the stockholders. 8°. *Charleston, S. C.*, 1855. pp. 14.

Charrin. Les carabines de guerre, les fusils transformés et leurs balles, avec des notions précises sur tous les projectiles d'armes à feu portatives depuis cinq cent ans; et une nouvelle balle à triple forcement; avec 31 gravures. 12°. *Paris*, 1860.

CHARTS. Méthodes pour la levée et la construction des cartes et plans hydrographiques. *See* **Beautemps-Beaupré,** C. F.

Chase, A. W. Recipes or information for everybody; a collection of about 800 practical recipes for merchants, grocers, etc. 23d ed. 16°. *Ann Arbor, Mich.*, 1835.

Chase, Heber. The final report of the committee of the Philadelphia medical society on the construction of instruments, and their mode of action, in the radical cure of hernia; notes; illustrations of certain instruments designed for the treament of other diseases affecting similar parts. 8°. *Philadelphia*, 1837.

Chase, S. A treatise on algebra, for the use of schools and colleges. 12°. *New York*, 1849.

Digitized by Google

Chassiron, Pierre Charles Martin, *Baron* de. Concours pour les machines hydrauliques, etc.; rapport. *See* **Challan,** A. D. J. B., and others.

CHATHAM, Improvement of the fort and arsenal of, by Sir S. Bentham. **Weale's papers on engineering, v. 6.**

Chaudet. Die Probirkunst: nach L'art de l'essayeur. *See* **Hartmann,** C. F. A. **97 Neuer Schauplatz der Künste.**

Chaulnes, Michel Ferdinand d'Albert d'Ailly, *Duc de.* Description d'un microscope et de différent micromètres. PARIS. **Acad. des sc., arts et métiers, v. 18 and v. 42.**

——— Méthode pour diviser les instruments de mathématique et d'astronomie. PARIS. **Acad. des sc., arts et métiers, v. 18 and v. 42.**

Chaumont, L. *See* **Cour** de dessin linéaire.

Chaussard. L'industrie ou les arts; ode public à l'occasion de la fête du vendémiare, an. 7. 3e éd. 4°. *Paris,* 1806.

Chaussier, Hector. Manuel pratique des contre-poisons, suivi des moyens de rappeler la vie dans les cas de mort apparente. 4e éd. 18°. *Paris,* 1836. **18 Manuels Roret.**

Chauveau, Pierre J. O. Report of the superintendent of education for Lower Canada, 1855, 1866. *See* CANADA.

Chauvenet, William. A manual of spherical and practical astronomy; with appendix on the method of least squares. 2 v. 8°. *Philadelphia,* 1863.

——— A treatise on the method of least squares in the application of the theory of probabilities in the combination of observations in astronomy. 8°. *Philadelphia,* 1868.

——— A treatise on plane and spherical trigonometry. 8°. *Philadelphia,* 1850.

Chelsum, James. A history of the art of engraving in mezzotinto, from its origin to the present times. 12°. *Winchester,* 1786.

CHEMICAL analysis and assaying. *See* **De Koninck,** L. L., and **Dietz,** E.

——— analysis. Leitfaden für die quantitative chemische Analyse. *See* **Rammelsberg,** C. F.

——— analysis, Manual of. *See* **Hoffmann,** Frederick.

——— analysis, Manual of. *See* **Noad,** Henry M.

——— analysis, Outlines of. *See* **Will,** Heinrich.

CHEMICAL analysis, Quantitative. *See* **Fresenius,** C. Remigius.

——— analysis. Traité pratique d'analyse chimique. *See* **Rose,** Henri.

——— apparatus, A catalogue of. *See* Griffin, John Joseph.

——— gazette, The, or journal of practical chemistry, in all its applications to pharmacy, arts and manufactures. v. 1–17, 8°. *London,* 1842–59.

——— news (The) and journal of physical science, with which is incorporated the "Chemical gazette," ed. by Wm. Crookes. v. 1–35. 4°. *London,* 1860–76———.

——— news, and journal of physical science; a journal of practical chemistry. American supplement. In 3 v. Ed. by William Crookes. Authorized American reprint. *New York,* 1869–70.

——— pamphlets, by M. Becquerel and others. 2 v. 4°. 8°. *Orléans,* 1850.

——— philosophy, An epitome of. *See* **Dana,** James Freeman.

——— philosophy, An introduction to. *See* **Wurtz,** Adolphe C.

——— physiology, Manual of. *See* **Lehmann,** Karl G.

Chemisch-pharmaceutisches Central-Blatt, 1850–61. 12 v. 8°. (The vols. 1856–61 are called Chemisches Centralblatt.)

Chemisches Centralblatt. *See* next above.

Chemist, The; a monthly journal of chemical and physical science; ed. by John and Charles Watt. v. 1–4. 8°. *London,* 1854–57.

——— The American. *See* **Chandler,** C. F. and W. H.

——— The operative. *See* **Gray,** S. F.

CHEMISTRY. *See* **Brande,** W. T., and **Taylor,** A. S.

——— Agricultural. *See* **Agricultural** chemistry.

——— and electricity, The elements of. *See* **Reid,** B. D., and **Bain,** Alexander.

——— and metallurgy as applied to dental surgery. *See* **Piggot,** A. Snowden.

——— and physiology, Discoveries in. *See* **Yeats,** G. D.

——— Animal. *See* **Liebig,** J. v.

——— Animal. *See* **Simon,** J. Franz.

——— Anleitung zur Analyse organischer Körper. *See* **Liebig,** J. v.

——— Anleitung zur Darstellung und Prüfung chemischer und pharmaceutischer Präparate. *See* **Wittstein,** G. C.

Digitized by Google

CHEMISTRY. Annalen der Chemie und Pharmacie. *See* **Annalen.**

——— Annales de chimie et de physique. *See* **Annales.**

——— Annals of. *See* **Sturgeon,** W.

——— Annuaire de chimie. *See* **Millon,** E., and **Reiset,** J.

——— Annual report of the progress of. *See* **Liebig,** J. v., and **Kopp,** H.

——— Ansichten über die Aufgabe der Chemie. *See* **Kopp,** Hermann.

——— applied to agriculture. *See* **Chaptal,** J. A.

——— applied to dyeing. *See* **Napier,** James.

——— app ied to manufactures, etc. *See* **Parnell,** E. A.

——— applied to the manufacture of soap and candles. *See* **Morfit,** Campbell.

——— Atlas of physiological chemistry. *See* **Funke,** O. **Publications** of the Cavendish society.

——— Ausführliches Handbuch der analytischen Chemie. *See* **Rose,** Heinrich.

——— Ausführliches Lehrbuch der organischen Chemie. *See* **Kolbe,** Hermann.

——— Beleuchtung der organischen Chemie. *See* **Hlubek,** F. X.

——— Bibliotheca chemica et pharmaceutica. *See* **Ruprecht,** Rud.

——— Cameralchemie. *See* **Doebereiner,** F.

——— Chemical and pharmaceutic manipulations. *See* **Morfit,** Campbell.

——— Chemical atlas. *See* **Youmans,** Edward L.

——— Chemical essays. *See* **Parkes,** Samuel.

——— Chemical essays. *See* **Watson,** R.

——— Chemical handicraft. *See* **Griffin,** John Joseph.

——— Chemical history of a candle. *See* **Faraday,** Michael.

——— Chemical instruction. *See* **Hare,** Robert.

——— Chemical manipulations. *See* **Faraday,** M.

——— Chemical manipulations. *See* **Morfit,** C.

——— Chemical method, etc. *See* **Laurent,** A. **Publications** of the Cavendish society.

——— Chemical processes and products. *See* **Bell,** Jacob. **Lectures** on the results of the exhibition.

——— Chemical recreations. *See* **Griffin,** John Joseph.

——— Chemical substances, Solubilities of. *See* **Storer,** Frank H.

——— Chemical tables. *See* **Rose,** H.

——— Chemical technology. *See* **Knapp,** F.

CHEMISTRY. Chemical technology. *See* **Ronalds,** Edmund, and **Richardson,** T.

——— Chemical theory, A history of. *See* **Wurtz,** Ad.

——— Chemie der organischen Verbindungen. *See* **Löwig,** Carl.

——— Chemie in ihrem Verhältnisse zur Physiologie und Pathologie. *See* **Pettenkofer,** M.

——— Chemie und Industrie unserer Zeit. *See* **Schwarz,** H.

——— Chemisches Centralblatt. *See* **Chemisch-pharmaceutisches Centralblatt.**

——— Chemische Fabrik. *See* **Stieren,** Eduard.

——— Chemische Fabrikindustrie. *See* **Wagner,** Joh. Rudolf.

——— Chemische Feldpredigten für deutsche Landwirthe. *See* **Stöckhardt,** Julius Adolph.

——— Chemische Grossindustrie auf der Weltausstellung zu Wien im Jahre 1873. *See* **Beilstein,** F.

——— Chemische Grundstoffe oder Elemente. *See* **Kletzinsky,** V.

——— Chemische Reactionen der wichtigsten anorganischen und organischen Stoffe. *See* **Heppe,** Phil. Gustav.

——— Chemisch technische Mittheilungen der Jahre 1846–59. *See* **Elsner,** L.

——— Chemische Technologie. *See* **Wagner,** Johannus Rudolf.

——— Chimie agricole. *See* **Pierre,** J. T.

——— Chimie appliquée aux arts. *See* **Chaptal,** J. A.

——— Chimie appliquée aux arts. *See* **Dumas,** J. B.

——— Chimie appliquée aux arts industriels. *See* **Girardin,** J. P. L.

——— Chimie organique. *See* **Bertholot,** P. M.

——— Chimie photographique. *See* **Barreswil,** C. L., and **Davanne.**

——— Chimie pneumatique appliquée aux travaux sous l'eau, dans les puits, les mines, les fosses, etc. *See* **Brizé-Fradin,** C. A.

——— Class book of. *See* **Youmans,** Edward L.

——— Commercial handbook of chemical analysis. *See* **Normandy,** A.

——— Conversations sur la chimie. *See* **Conversations.**

——— Culinary. *See* **Accum,** Frederick.

——— Cyclopædia of. *See* **Thomson,** R. D.

Digitized by Google

CHEMISTRY. Dictionnaire de chimie. *See* **Cadet**, Charles Louis.

——— Dictionnaire de chimie industrielle. *See* **Barreswil**, C. L., and **Girard**, A.

——— Dictionnaire de chimie, pure et appliquée, etc. *See* **Wurtz**, Ad.

——— Dictionnaire usuel de chimie, de physique, et d'histoire naturelle. *See* **Brard**, C. P.

——— Elementary. *See* **Fownes**, George.

——— Elementary. *See* **Scoffern**, J. **Orr's circle of the sciences, v. 6.**

——— Elementary, Four lectures on. By Prof. Roscoe. **Science lectures for the people, series 1.**

——— Elements of. *See* **Graham**, T.

——— Elements of. *See* **Kane**, *Sir* R.

——— Elements of. *See* **Lavoisier**, M.

——— Elements of. *See* **Miller**, Wm. Allen.

——— Elements of. *See* **Regnault**, H. v.

——— Elements of chemical analysis. *See* **Parnell**, E. A.

——— Elements of chemical physics. *See* **Cooke**, Josiah P.

——— Elements of inorganic. *See* **Graham**, T.

——— Elements of medical. *See* **Rand**, B. Howard.

——— Encyclopedia of. *See* **Booth**, J. C.

——— Familiar letters on. *See* **Liebig**, Justus.

——— The first step in. *See* **Galloway**, Robert.

——— for students. *See* **Williamson**, Alexander W.

——— General notions of. *See* **Pelouze**, J., and **Fremy**, E.

——— General principles of chemical philosophy. *See* **Daubeny**, C. **Supplement** to introduction of the atomic theory.

——— Handbook of. *See* **Gmelin**, L. **Publications** of the Cavendish society.

——— Handbook of chemical manipulation. *See* **Williams**, C. G.

——— Handbook of organic. *See* **Gregory**, W.

——— Handbuch der chemischen Fabrikenkunde. *See* **Herzberg**, C. **185 Neuer Schauplatz der Künste.**

——— Handbuch der chemischen Technologie. *See* **Bolley**, P.

——— Handbuch der Mineral-Chemie. *See* **Rammelsberg**, C. F.

——— Handbuch der technischen Chemie. *See* **Stohmann**, F., and **Engler**, Carl.

CHEMISTRY. Hülfsbuch zur Ausführung chemischer Arbeiten, für Chemiker, Pharmaceuten und Mediciner. *See* **Schwanert**, Hugo.

——— Improvement in the chemical arts. *See* **Booth**, J. C., and **Morfit**, C. **Smiths'n misc. coll., v. 2.**

——— in its application to agriculture and physiology. *See* **Liebig**, Justus.

——— Inorganic. *See* **Engler**, Carl.

——— Inorganic. *See* **Graham**, Thomas.

——— Inorganic and organic. *See* **Bloxam**, Charles London.

——— Instructions in chemical analysis. *See* **Fresenius**, C. R.

——— Introduction to. *See* **Imison**, J.

——— Introduction to chemical philosophy. *See* **Daniell**, J. F.

——— Jahres-Bericht über chemische Technologie. *See* **Wagner**, J. R.

——— Jahres-Bericht über die Fortschritte der Chemie. *See* **Liebig**, J. v., and **Kopp**, H.

——— Journal für praktische Chemie. *See* **Journal.**

——— Journal of applied. *See* **Electrician.**

——— Kurzes Lehrbuch der organischen Chemie. *See* **Strecker**, Adolph.

——— Lectures on. *See* **Noad**, H. M.

——— Lectures on some of the arts connected with organic. *See* **Brande**, W. T.

——— Lehrbuch der anorganischen Chemie. *See* **Büchner**, P. T.

——— Lehrbuch der Chemie. *See* **Berzelius**, J. J.

——— Lehrbuch der Chemie. *See* **Gorup-Besanez**, E. F. v.

——— Lehrbuch der Chemie für Landwirthe. *See* **Schulze**, Franz.

——— Letters on. *See* **Liebig**, J. v.

——— Lexicon chymicum. *See* **Johnsonus**, Gulielmus.

——— Manual of. *See* **Brande**, W. T.

——— Manual of. *See* **Fownes**, George.

——— Manual of. *See* **Olding**, William.

——— Manual of. See **Webster**, John W.

——— Manual of photographic. *See* **Hardwich**, T. F.

——— Manuel de chimie. *See* **Vergnaud**, A. D. **4 Manuels Roret.**

——— Manuel de chimie amusante. *See* **Accum**, F., and others. **6 Manuels Roret.**

——— Manuel du fabricant de produits chimiques. *See* **Thillaye**, L. S. **7 Manuels Roret.**

Digitized by Google

CHEMISTRY, Medical. *See* **Gardner**, D. P.
——— Metallurgic chymistry. *See* **Gellert**, C. E.
——— Mittheilungen über metallische Superoxyde. *See* **Schoenbein**, C. F.
——— modern, Introduction to. *See* **Hofmann**, A. W.
——— The new, by Josiah P. Cooke, jr. **International scientific series, v. 6.**
——— A new method of. *See* **Boerhaave**, H.
——— Nouvelles manipulations chimiques. *See* **Violette**, H.
——— of animal and vegetable growth. *See* **Rothamsted** memoirs.
——— of animal bodies. *See* **Thomson**, Thomas.
——— of food. *See* **Liebig**, J. v.
——— of gas lighting. A collection of fragments from v. 2 and 3 of the Journal of gas lighting, rev. and re-arranged. 8°. *London*, 1860.
——— of non-metallic elements and their compounds. *See* **Griffin**, John Joseph.
——— of vegetable and animal physiology. *See* **Mülder**, G. J.
——— Organic. *See* **Liebig**, Justus v.
——— Organic. *See* **Stohmann**, F.
——— Outlines of. *See* **Gregory**, William.
——— Outlines of lectures on. *See* **Torrey**, Prof.
——— Physiological. *See* **Lehmann**, K. G.
Publications of the Cavendish society.
——— Praktische Arbeiten im chemischen Laboratorium. *See* **Bischoff**, C.
——— Précis de chimie industrielle. *See* **Payen**, A.
——— Principles and applications of. *See* **Wells**, David A.
——— Principles of. *See* **Silliman**, B., *jr.*
——— Principles of. *See* **Stöckhardt**, Julius Adolph.
——— Principles of. *See* **Swedenborg**, Emanuel.
——— Principles of organic and physiological. *See* **Löwig**, K. J.
——— Prüfung photographischer Chemikalien. *See* **Barclay**, C. J.
——— Rapport méthodique sur les progrès de la chimie organique pure, en 1868. *See* **Micé**, L.
——— Rapport sur les progrès de la chimie. *See* **Berzelius**, J. J.
——— Répertoire de chimie appliquée. *See* **Répertoire.**
——— Répertoire de chimie pure et appliquée. *See* **Répertoire.**

CHEMISTRY, Rural. *See* **Solly**, Edward.
——— The second step in. *See* **Galloway**, Robert.
——— Syllabus of lectures on. *See* **Solly**, E.
——— System of. *See* **Thomson**, T.
——— Technisch-chemisches Recept-Taschenbuch. *See* **Winckler**, E.
——— Technische Chemie und chemische Technologie. *See* **Schubarth**, E. L.
——— Technisch-chemische Untersuchungen. *See* **Bolley**, P. A.
——— Theoretical and practical, The elements of. *See* **Reid**, D. B.
——— Theoretical, practical and analytical. *See* **Muspratt**, J. S.
——— Traité d'analyse chimique par la méthode des volumes. *See* **Poggiale**, A. B.
——— Traité de chimie. *See* **Berzelius**, J. J.
——— Traité de chimie. *See* **Thénard**, L. J.
——— Traité de chimie élémentaire. *See* **Allain**, P. A.
——— Traité de chimie organique. *See* **Gerhardt**, C. F.
——— Traité de chimie technologique appliquée. *See* **Barruel**, G.
——— Traité de manipulations chimiques. *See* **Bobierre**, A.
——— Traité des essais par la voie sèche. *See* **Berthier**, P.
——— Treatise of chemical analysis. *See* **Rose**, H.
——— Treatise on. *See* **Donovan**, Michael.
Lardner's cabinet cyclopædia, No. 100.
——— Ueber Bleysesquiphosphat. *See* **Vogel**, A., and **Reischauer**, G. C.
——— Ueber die chemische Beschaffenheit von Basel's Grund-, Bach-, Fluss- und Quell-Wasser, etc. *See* **Goppelsröder**, Friedrich.
——— Ueber die chemische Constitution organischer Verbindungen. *See* **Kolbe**, H.
——— Ueber den Chemismus der Vegetation. *See* **Vogel**, A.
——— Ueber einige neue Reihen chemischer Berührungswirkungen. *See* **Schoenbein**, C. F.
——— Verzeichniss chemischer Instrumente u. s. w. *See* **Oechsle**, C. L.
——— Vierteljahresschrift für technische Chemie. *See* **Artus**, W.
CHEMISTS' assistant. *See* **Woehler**, Friedrich.
CHENILLE. Abridgments English Patents, No. 29.

Digitized by Google

CHERBOURG, Mémoires de la Société des sciences naturelles de. T. 1–19, 1852–75. 8°. *Cherbourg*, 1853–75.

Cherry, Cummings and James. Cincinnati and Sonora mining association; maps and reports of the San Juan del Rio Rauche, in Sonora, Mexico. 8°. *Cincinnati*, 1866.

Cherry, Frederick Clifford. Art of shoeing horses *See* **Solleysell,** Sieur de.

Chertier, F. M. Lustfeuerwerkerei; von. *See* **Büttner,** F. C. A. **92 Neuer Schauplatz der Künste.**

——— Nouvelles recherches sur les feux d'artifice. *Illus.* 8°. *Paris*, 1843.

Chesney, Frandis Rawdon. Observations on the past and present state of fire-arms, and on the probable effects in war of the new musket, etc. 8°. *London*, 1852.

CHESS, Brevity and brilliancy in. *See* **Hazeltine,** Miron J.

——— Marache's manual of. *See* **Marache,** N.

CHEST, Diseases of the. *See* **Gerhard,** W. W.

——— On the diseases of the. *See* **Swett,** John A.

CHESTER, England. Specification of Chester Dee bridge. *See* **Weale's theory of bridges, v. 2.**

Chevalier, Arthur. La méthode des portraits grandeur naturelle et des agrandissements photographiques. 8°. *Paris*, 1862. pp. 41.

——— Méthodes photographiques; notes par. *See* **Chevalier,** C.

Chevalier, Charles. Catalogue des appareils photographiques de. 8°. *Paris*, 1856.

——— Manuel du physicien-préparateur par. *See* **Fau,** J.

——— Méthodes photographiques perfectionnées. Papier sec; albumine, collodion sec; collodion humide, par MM. A. Civiale, de Brébisson, Baillieu d'Avrincourt de Nostitz, E. Bacot, Adolphe Martin, Niepce de Saint-Victor, etc. Optique photographique et stéréoscope. Notes diverses par Arthur Chevalier. 8°. *Paris*, 1859.

——— Photographie sur papier sec; glaces albuminées, collodion, plaques métalliques. Divers procédés par MM. E. Bacot, Baillieu d'Avrincourt, Bayard, Arthur Chevalier, A. Festeau. Description d'une nouvelle chambre obscure pour opérer en

Chevalier, Charles—Continued.

pleine lumière. Avantages de l'objectif à verres combinés, inventé par. 12°. *Paris*, 1857. pp. 75.

Chevalier, Michel. Album de l'exposition universelle; par concours de. *See* **Brisse,** L.

——— Histoire et description des voies de communication aux États Unis et des travaux d'art qui en dépendent. T. 1, 2. 4°. pl. fol. *Paris*, 1840–41.

Chevallier, A. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

Chevallier, Jean Baptiste Alphonse. Verfälschung der Nahrungsmittel u. s. w. *See* **Klencke,** H.

Chevallier, M. A. Dictionnaire des altérations et falsifications des substances alimentaires, médicamenteuses et commerciales, avec l'indication des moyens de les reconnaître. 2 v. 3e éd. 8°. *Paris*, 1855–57.

Chevreul, Michel Eugène. Considérations scientifiques. *See* **Niepce de Saint-Victor,** C. M. F. **Recherches** photographiques.

——— The principles of harmony and contrast of colours, and their applications to the arts; translated from the French by Chas. Martel. 3d ed. *Illus.* 8°. *London*, 1859.

Cheyne, George. An essay of health and long life. 8°. *London*, 1725.

CHICAGO, Commerce, etc., of. *See* **Commerce.**

——— directory for 1875–6. The lakeside annual: embracing a complete general and business directory. 8°. *Chicago*, 1875.

——— rebuilt. *See* **Merchants** and manufacturers of Chicago.

Chicoineau, M. Manuel théorique et pratique du tanneur, du corroyeur, et de l'hongroyeur, par. Orné de planches. 18°. *Paris*, 1826. **118 Manuels Roret.**

Child, Lydia Maria. The girl's own book. 16°. *New York, n. d.*

CHILDBED fevers. *See* **Meigs,** Charles, D.

CHILDREN, Diseases of. *See* **Condie,** D. Francis.

——— ——— *See* **Meigs,** J. Forsyth.

——— The physical and medical treatment of. *See* **Dewees,** Wm. P.

CHILI. Anales de la Universidad de Chile. *See* SANTIAGO.

Digitized by Google

CHILI. Essai sur le Chili. *See* **Perez-Rosales, V.**

——— Estadistica de la república de Chile. Provincia del Maule. Tomo 1°. 8°. *Santiago*, 1845.

CHIMNEY-pieces, Designs for. *See* **Milton, T., Crumden, J., and Columbiani, P.**

CHIMNEYS, Construction of. *See* **Clavering, Robert.**

——— ——— *See* **Hiort, John William.**

——— ——— *See* **Whitehurst, J.**

——— for furnaces, fire-places, and steam-boilers. *See* **Armstrong, R. Van Nostrand's science series, No. 1**

——— Le fumiste. *See* **Pelouze, E. Encyclopédie populaire, v. 16.**

——— Patent metallic lining and damper for. *See* **Smith, Seth.**

——— Prevention and cure of smoky. *See* **Silver, G.**

——— Treatise on. *See* **Eckstein, G. F.**

CHINA, Costume of. *See* **Mason, George Henry.**

——— Description of the empire of. *See* **Davis, J. F.**

——— Extensive view of. *See* **Peters, John R., *jr.***

——— Journey through. *See* **Huc, E.**

——— Journey to the tea-countries of. *See* **Fortune, R.**

——— or illustrations of the symbols, etc., of the Chinese. *See* **Kidd, Samuel.**

——— political, commercial and social. *See* **Martin, R. M.**

——— Produits d'un voyage en Chine. *See* **Hedde, Isidore.**

——— Residence among the Chinese. *See* **Fortune, R.**

——— The middle kingdom: a survey of the Chinese empire. *See* **Williams, S. W.**

——— Wandering in the northern provinces of. *See* **Fortune, Robert.**

CHINESE ornaments. *See* **Jones, Owen.**

CHIPS from a German workshop. *See* **Müller, F. Max.**

CHISELS. Ueber die beim Gebirgsbohren angewendeten Meissel. *See* **Seckendorff, W. v.**

CHIVALRY. Pietra paragone de' cavalieri. *See* **Alesandro, D. Giuseppe d'.**

CHLORINE. Bereitung des Chlors. *See* **Stratingh, S. 46 Neuer Schauplatz der Künste.**

CHLOROFORM and other anæsthetics, etc. *See* **Snow, John.**

——— A manual of etherization, etc. *See* **Jackson, Charles T.**

CHOCOLATE. Der Chocoladefabricant. *See* **Schmidt, C. H. 20 Neuer Schauplatz der Künste.**

Cholmet, N. Theoretische und praktische Elemente der Maschinen-Flachs-, sowie auch Hanf- und Werg-Spinnerei, aus dem Französischen von C. H. Schmidt. 8°. *Weimar*, 1842. **128 Neuer Schauplatz der Künste.**

CHOLERA, Asiatic. *See* **Burrall, F. A.**

——— ——— *See* **Nelson, R.**

——— ——— *See* **Peters, John C.**

——— ——— *See* **Whitney, E. and A. B.**

——— ——— in Genoa, 1873. *See* **Colèra.**

——— Epidemic. *See* **Jameson, Horatio Gates, *sr.***

——— ——— of 1848–49. Report by Grainger. *See* GREAT BRITAIN.

——— ——— Treatise on. *See* **Tardieu, Ambroise.**

——— its cause, prevention and cure. *See* **Richardson, Charles.**

——— Die Kinder-Cholera oder Summer Complaint in den Vereinigten Staaten. *See* **Hexamer, Adolph C.**

Chomel, A. F. Elements of general pathology. Transl. from French by T. E. Oliver and W. W. Morland. 3d ed. roy. 8°. *Boston*, 1848.

Chomel, Noël. Dictionnaire œconomique, contenant divers moiens d'augmenter son bien, et de conserver sa santé, etc. Rev. et augmenté par J. Marret. 3e éd. fol. *Amsterdam*, 1732.

Chorlton, William. The American grape grower's guide; intended especially for the American climate; hot house, cold grapery, retarding house, and out-door culture; with plans for buildings. 12°. *New York*, 1856.

——— The cold grapery, from direct American practice; a treatise on the cultivation of the exotic grape-vine under glass without artificial heat. 12°. *New York*, 1853.

Choron, A. É., and **Lafage,** J. A. de. Manuel complet de musique vocale et instrumentale. 1e partie. 1. 18°. *Paris.* **68 Manuels Roret.**

Choules, John Overton. History and topography of the United States; continued by. *See* **Hinton, J. H.**

Digitized by Google

Chouteau, Auguste. Fragment of the journal of. *See* ST. LOUIS. **Report** of the Mercantile library association, 1858.

Christian. Description des machines et procédés; publiée par. *See* FRANCE.

——— Traité de mécanique industrielle, ou exposé de la science de la mécanique déduite de l'éxpérience et de l'observation. T. 1-2. 4°. *Paris*, 1822-23.

CHRISTIAN religion, The true. *See* **Swedenborg,** Emanuel.

CHRISTIANIA (Norway). Observatory. Meteorologische Beobachtungen; aufgezeichnet auf Christiania's Observatorium. Lieferung 1 und 2. l. 8°. *Christiania*, 1862.

Christison, John. Mathematical tables; consisting of the logarithms of numbers, logarithms of sines, tangents and secants, natural sines, etc. 8°. *Edinburgh and London*, 1830.

Christison, Robert. A dispensatory, or commentary on the pharmacopœias of Great Britain and the United States; with additions by R. E. Griffith. 8°. *Philadelphia*, 1848.

Christy, David. The chemistry of agriculture; the earth and atmosphere as related to vegetable and animal life, with analytical tables. 8°. *Cincinnati*, 1852.

CHROMATIC hand-book, The artist's. *See* **Ridner,** John P.

CHROMATOGRAPHY: a treatise on colours and pigments, etc. *See* **Field,** George.

CHROMO-glyphotype, Art of. *See* **Donlevy,** J.

CHRONIC diseases. *See* **King,** John.

Chronicle, The gardener's; and agricultural gazette. *See* **Gardener's** chronicle.

CHRONOLOGY. Blair's chronological tables. *See* **Blair,** John.

——— British history chronologically arranged. *See* **Wade,** John.

CHRONOMETERS, The management of. *See* **Shadwell,** Charles F. A.

CHRONOSCOPE. Das Chronoskop. Instrument zur Bestimmung der Zeit und der Polhöhe. *See* **Steinheil,** C. A.

CHRONO-thermal system of medicine. *See* **Dickson,** Samuel.

Chubb, George Hayter. Protection from fire and thieves; including the construction of locks, safes, strong-rooms, and fire proof buildings; and a complete list of patents for locks and safes. 12°. *London*, 1875.

Church, Albert E. Elements of analytical geometry. 8°. *New York*, 1851.

——— Elements of the differential and integral calculus; containing the elements of the calculus of variations. 8°. *New York*, 1850.

CHURCH bells, An account of. *See* **Lukis,** W. E.

Churchill, Fleetwood. On the diseases of women; including those of pregnancy and child-bed. New American ed., rev. by the author, with notes by D. Fr. Condie. 8°. *Philadelphia*, 1857.

——— On the theory and practice of midwifery. 8°. *Philadelphia*, 1851.

CIDER. Der Cider, oder Obstwein. *See* **Lucas,** Ed.

——— Manuel du fabricant de cidre. *See* **Dubief,** L. F. **102 Manuels Roret.**

Ciliax, Jac. C. Vollständiges Handbuch des Riemers und Sattlers. Nebst einem Anhange, wichtige Erfindungen und Verbesserungen an den Reitsätteln, Kummten und Zäumen betreffend. *Illus.* 8°. *Weimar*, 1846. **64 Neuer Schauplatz der Künste.**

Ciliax, Theodor Jac. Tischlerkunst; umgearbeitet von. *See* **Stockel,** H. F. A. **5 Neuer Schauplatz der Künste.**

Cima, Antonio. Ricerche intorno alcuni punti di elettro-fisiologia. sm. 4°. *Bologna*, 1858.

CINCINNATI, Ohio. Industrial exposition, 1874, Report of board of commissioners of. 8°. *Cincinnati*, 1874.

——— Industrial exposition, 1875, Rules and premium list of 6th. 8°. *Cincinnati*, 1875.

——— Trade and commerce of. 1857-58. *See* **Smith,** W.

——— The young men's mercantile library association, 23d annual report of the board of directors of, for 1857. 8°. *Cincinnati*, 1858. pp. 23.

CINEMATICS. Theoretische Kinematik. *See* **Reuleaux,** F.

CIRCLE, The measure of the. *See* **Davis,** John.

CIRCLES of proportion, and horizontall instrument. *See* **O.,** W.

Circular, The publishers'. *See* **Publishers'** circular.

Circulars of information of the bureau of education. *See* UNITED STATES. **Interior department. Bureau of education.**

CIRCULATION, History of prices and the state of. *See* **Tooke,** T.

Digitized by Google

CITY of the Great King, The. *See* **Barclay**, J. T.

Civiale. Traité pratique et historique de la lithotritie, par. 8°. *Paris*, 1847.

Civiale, A. Méthodes photographiques: procédé sur papier sec, de. *See* **Chevalier**, C.

Civil engineer and architect's journal, The. 30 v. 4°. *London*, 1837-67.

CIVIL engineering. *See also* **Engineering** (Civil).

——— An elementary course of. *See* **Mahan**, D. H.

——— ——— A treatise on. *See* **Mahan**, D. H.

——— engineers; charter, bye-laws, and list of members. *See* LONDON. **Institution** of civil engineers.

——— ——— List of members. *See* LONDON. **Institution** of civil engineers.

Civilingenieur (Der). Zeitschrift für das Ingenieurwesen. 1st series, B. 1-2, 1848-50; new series, B. 1-22, 1854-76. 4°. *Freiberg*, 1848-76——.

——— ——— Generalregister zu B. 1-20 (1854-74). 4°. *Leipzig*, 1875.

CIVILIZATION, Curiosities of. *See* **Wynter**, Andrew.

Clairac, *M. Le Chevalier* de. The field engineer; from French. Transl. by John Müller. 2d ed. *Illus.* 8°. *London*, 1773.

Clark, Bracy. Description of a new horse shoe which expands to the foot; with apparatus for making the new tablet shoe. 2d ed. 4°. *London*, 1827. pp. 12. [Bound with Hippodonomia.]

——— Guide to the shoeing forge. 4°. *London*. pp. 7. [Bound with Hippodonomia.]

——— Hippiatria; or the surgery and medicine of horses. 4°. *London*, 1838.

——— Hippodonomia; the true structure, laws, and economy, of the horse's foot; also podophthora; a ruinous defect in the principle of the common shoe detected and demonstrated by experiments: with a proposition for a new principle of shoeing. 2d ed. 4°. *London*, 1829.

——— A treatise on the bits of horses; chalinologia. 4°. *London*. pp. 63. [Bound with Hippodonomia.]

Clark, Daniel Kinnear. An elementary treatise on steam and the steam engine, stationary and portable; being an extension of the elementary treatise on steam, by John Sewell. *Illus.* 12°. *London*, 1875.

Clark, Daniel Kinnear. Exhibited machinery of 1862; a cyclopædia of the machinery represented at the international exhibition. 8°. *London*, 1864.

——— Railway machinery; a treatise on the mechanical engineering of railways: embracing the principles and construction of rolling and fixed plant. Illustrated by a series of plates on a large scale, and by numerous engravings on wood. v. 1, text; v. 2, plates. fol. *Glasgow*, 1855.

——— and **Colburn**, Z. Recent practice in the locomotive engine: a supplement to "Railway machinery." *Illus.* 4°. *Glasgow*, 1860. [2 copies.]

Clark, Davis W. Elements of algebra; also the theory and application of logarithms. 8°. *New York*, 1846.

Clark, Henry James. Mind in nature; the origin of life and the mode of development of animals. 8°. *New York*, 1865.

Clark, I. A. The Prussian calculator; by which all business calculations are performed by one rule: with an appendix. 5th ed. 18°. *Rochester, N. Y.*, 1846.

Clark, Latimer. An elementary treatise on electrical measurement; for the use of telegraph inspectors and operators. 16°. *London*, 1868.

Clark, Samuel. An easy introduction to the theory and practice of mechanics. 4°. *London*, 1764.

Clark, Thomas. Humanity to honey bees; ed. by. *See* **Nutt**, T.

——— The student's handbook of comparative grammar; applied to the Sanskrit, Zend, Greek, Latin, Gothic, Anglo-Saxon and English languages. 8°. *London*, 1862.

Clarke, Charles E. Letter on plank roads. *See* **Kingsford**, W.

Clarke, F. W. Weights, measures, and money of all nations. 12°. *New York*, 1875.

Clarke, Hyde. Engineering of Holland. **Weale's papers on engineering, v. 2.**

——— Grammar of the English tongue, spoken and written. 18°. *Philadelphia*, 1855.

——— Manufacture of bricks and tiles in Holland. **Weale's papers on engineering, v. 3.**

——— New and comprehensive dictionary of the English language, as spoken and written. *London*, 1855 and 1861. [2 copies.]

Digitized by Google

Clarke, Hyde. Plans adopted at New York for docking ships. **Weale's papers on engineering, v. 4.**

Clarke, L. Lane. Objects for the microscope: a popular description of the most instructive and beautiful subjects for exhibition. 3d ed. 16°. *London,* 1870.

Clarke, Thomas Curtis. An account of the iron railway bridge across the Mississippi river, at Quincy, Ill. 4°. *New York,* 1869.

Clarke, William Fairlie. Bandages and splints: a supplement to the author's manual of the practice of surgery. 24°. *London,* 1868.

Clarke, Reeves & co. Phœnixville bridge works: album of designs shewing various styles of iron railway bridges. fol. *Philadelphia, n. d.*

Clas, G. Die geognostischen Verhältnisse und Bodenarten Württembergs in ihrer Beziehung zur Landwirthschaft. 8°. *Ravensburg,* 1869.

Classen, Alexander. Tabellen zur qualitativen Analyse. 8°. *Stuttgart,* 1876.

CLASSICAL and utilitarian studies. *See* **Bigelow,** Jacob.

CLASSICS. A classical dictionary. *See* **Anthon,** C.

—— a dictionary of Greek and Roman biography and mythology. *See* **Smith,** William.

CLASSISCOPE. *See* **Browne,** P. A.

Clater, Francis. Every man his own cattle doctor: containing the causes, symptoms and treatment of all the diseases incident to oxen, sheep and swine, and a sketch of the anatomy and physiology of neat cattle. Ed. etc. by William Youatt. 12°. *Philadelphia,* 1848.

Claudet, A. Recherches sur la théorie des principaux phénomènes de photographie dans le procédé du daguerréotype. 8°. *Paris,* 1850. pp. 15.

Clauss, Wilhelm. Locomotive-Maschine. *See* **Heusinger von Waldegg,** E.

CLAUSTHAL, Meteorologische Beobachtungen zu. *See* **Schoof,** C. L.

Clavering, Robert. An essay on the construction and building of chimneys. 3d ed. 8°. *London,* 1793.

Claxton, Timothy. Hints to mechanics on self-education and mutual instruction. 16°. *London,* 1839.

Clay, William. Useful metals and their alloys. *See* **Scoffern,** J., and others.

CLAY lands and loamy soils. *See* **Donaldson,** J. **Weale's series, No. 66.**

—— ware. Abriss der Thonwaarenindustrie. *See* **Kerl,** Bruno.

CLEANING, Art of. *See* **Love,** T.

Cleaveland, N. Greenwood: a directory for visitors. 16°. *New York,* 1850.

Cleaveland, Parker. An elementary treatise on mineralogy and geology. 2 v. in 1. 2d ed. 8°. *Boston,* 1822.

Clegg, Samuel, Memoir of. **Weale's papers on engineering, v. 2.**

Clegg, Samuel, *jr.* A practical treatise on the manufacture and distribution of coal gas, its introduction and progressive improvement; illustrated by engravings from working drawings, with several estimates. 3d ed. 4°. *London,* 1859. 2d ed., 1853.

—— Steam navigation: appendix "C". Gorgon engine. *See* **Tredgold,** T. **Steam navigation.**

—— and **Samuda,** Jacob. Atmospheric railway. 8°. *London,* 1840. pp. 23.

Cleland, John. Animal physiology; the structure and functions of the human body. 12°. *New York,* 1873. **Putnam's advanced science series.**

Clement, Clara Erskine. Painters, sculptors, architects, engravers, and their works; a hand-book. 8°. *New York,* 1874.

Clements, W. A. Cultivation of the sugar-cane. *See* **Eight practical treatises.**

Clephane, James O. Navy of the United States; speech in the case of Mattingly vs. W. and A. Steamboat Co.; reported by. *See* **Dickerson,** E. N.

Clerke, Gilbert. The spot dial; very useful to shew the hour within the house. sm. 4°. *London,* 1687.

CLERKS' and conveyancers' assistant; Abbott's forms. *See* **Abbott,** B. V. and Austin.

—— assistant, The new. *See* **Jenkins,** John S.

CLERMONT-FERRAND. Annales scientifiques, littéraires et industrielles de l'Auvergne, publiées par l'Académie des sciences, belles-lettres et arts de. Sous la direction de M. H. Lecoq. T. 28-30. 8°. *Clermont-Ferrand,* 1855-57.

Cleveland, H. W. S. Hints to riflemen. 8°. *New York,* 1864.

Digitized by Google

Clias, P. H. An elementary course of gymnastic exercises; with a treatise on the art of swimming. 4th ed. 8°. *London*, 1825. [2 copies.]

CLICKING, Treatise on. *See* **Boot** and shoemaker's assistant.

CLIMATE and time: a theory of the earth's climate. *See* **Croll,** James.

——— Influence of. *See* **Disturnell,** J.

——— Influence of a change of, in curing diseases. *See* **Gregory.**

——— Klima von Ostfriesland. *See* **Prestel,** M. A. F.

——— of America. *See* **Williamson,** Hugh.

CLIMATOLOGY of the United States. *See* **Blodget,** Lorin.

CLINICAL medicine, A system of. *See* **Graves,** Robert James.

——— notes on uterine surgery. *See* **Sims,** J. Marion.

Clinton, George W., Historical address by. *See* BUFFALO. **Young** men's association.

CLINTON hall association, New York. *See* NEW YORK.

CLOCK and watch-maker's guide. *See* **Partington,** C. F.

——— and watch-maker's manual. *See* **Booth,** M. L.

——— and watch-making. Beschreibung der Hemmungen. *See* **Martens,** J. H.

——— ——— Die englischen Pendeluhren.. *See* **Encyclopædia** Britannica. **9 Neuer Schauplatz der Künste.**

——— ——— Handbuch der Uhrmacherkunst. *See* **Schreiber,** E. **171 Neuer Schauplatz der Künste.**

——— ——— Manuel de l'horloger. *See* **Le Normand,** L. S. **104 Manuels Roret.**

——— ——— Treatise on. *See* **Denison,** E. B: **Weale's series, Nos. 67, 68.**

——— ——— Treatise on. *See* **Reid,** T.

CLOCKS. Abridgments English Patents, No. 9.

——— and watches, Curiosities of. *See* **Wood,** Edward J.

——— Clock and watch work. *See* **Cumming,** Alexander.

——— Freier Ankergang für Uhren. *See* **Grossman,** Moritz.

——— Schule des Uhrmachers. *See* **Heidner,** G.

CLOSET opened, The. *See* **Digby,** *Sir* Kenelme.

CLOTH-making. Art de la draperie, par H. L. Duhamel du Monceau. PARIS. **Acad. des sc., arts et métiers, v. 30, and v. 7.**

Clough, A. Bryant. The contractor's manual, and builder's price-book. 24°. *New York*, 1855. [3 copies.]

Cluz, F., and **Julia de Fontenelle,** J. S. E. Manuel complet des fabricans de chapeaux en tous genres. 18°. *Paris*, 1830. **96 Manuels Roret.**

Coach maker's illustrated monthly magazine. C. W. Saladee, ed. v. 1-3. 4°. *Columbus, O.*, 1855-57.

——— making. Coach maker's guide. *See* **Saladee,** C. W., & co.

——— ——— New York coach maker's magazine. *See* NEW YORK.

COAL. American coals, Report on. *See* UNITED STATES. **Congress.**

——— and the strata in which it is found. **Science lectures for the people, series 2.**

——— Art d'exploiter les mines de charbon de terre, par Morand. PARIS. **Acad. roy. des sc., arts et métiers, v. 2-5, 6, 16, 17, 18.**

——— Die Aufbereitung der Steinkohlen. *See* **Hartmann,** C. F. A. **237 Neuer Schauplatz der Künste.**

——— Chemical combustion of. *See* **Hood,** C.

——— colors. **Science lectures for the people, series 3.**

——— Combustion of. *See* **Williams,** C. W.

——— fields. **Science lectures for the people, series 2.**

——— fields of Great Britain. *See* **Hull,** E.

——— Die Fortschritte des Steinkohlen-Bergbaues. *See* **Hartmann,** C. F. A.

——— gas. *See* **Bowditch,** W. R.

——— ——— Kohlensaure Luft unschädlich gemacht. *See* **Heintl,** Franz Ritter von.

——— iron and oil; the practical American miner. *See* **Daddow,** S. H., and **Bannan,** B.

——— its economical value, and its importance in the arts and sciences. **Science lectures for the people, series 1.**

——— A manual of. *See* **Lesley,** J. P.

——— Manufacture of oils from. *See* **Antisell,** T.

——— mines. Moyens de soustraire l'exploitation des mines de houille aux chances d'explosion. *See* **Moyens** de.

——— ——— of the Dauphin and Susquehanna coal company, Two reports on. *See* **Taylor,** Richard C.

Digitized by Google

COAL mines. Perfectionnements introduits dans l'exploitation de la houille en Angleterre. *See* **Havres**, Jules.

——— oil and petroleum, etc. *See* **Ernf**, Henri.

——— oil derrick and drill. *See* **Derrick.**

——— Statistics of. *See* **Taylor**, Richard Cowling.

——— tar. Die Destillation des Steinkohlentheers, etc. *See* **Lunge**, Georg.

——— ——— Lectures on coal tar colors. *See* **Calvert**, F. C.

——— ——— Der Steinkohlentheer. *See* **Schrader**, Herrmann.

——— ——— Treatise on the coloring matter derived from. *See* **Dussance**, H.

——— Treatise on coal, petroleum, and other distilled oils. *See* **Gesner, A.**

Coale, George B. Manual of photography, adapted to amateur practice. Whipple's albumen process. 18°. *Philadelphia*, 1858. [2 copies.]

Coale, William Edward. Hints on health, with familiar instructions for the treatment and preservation of the skin, hair, teeth, eyes, etc. 12°. *Boston*, 1852.

COAST defence, A treatise on. *See* **Von Scheltha.**

——— pilot, for the upper lakes. *See* **Thompson**, Thomas S.

——— survey. Report of superintendent, 1852-69. 18 v. *See* UNITED STATES. **Treasury** department.

——— Voyage d'exploration sur le littoral de la France et de l'Italie. *See* **Coste.**

COBALT-plating. Die Kunst des Vergoldens, Verkobaltens, etc. *See* **Schmidt**, Christian H. **133 Neuer Schauplatz der Künste.**

Cobbold, T. Spencer. Entozoa: an introduction to the study of helminthology, with reference more particularly to the internal parasites of man. roy. 8°. *London*, 1864.

——— Entozoa: supplement to the introduction to the study of helminthology. roy. 8°. *London*, 1869.

Cochran, John W. On gauging: an exposition of the inaccuracy and unreliability of the present system, etc. roy. 8°. *New York*, 1859.

Cochrane, Richard and John. A comprehensive system of practical geometry. 8°. *Baltimore*, 1857.

Coddington, Henry. A treatise on the eyes and optical instruments. Part 2d of a system of optics. 8°. *Cambridge*, 1830. pp. 72.

Coddington, Henry—Continued.

CODE international; ou, la propriété industrielle, artistique et littéraire. *See* **Pataille**, J., and **Huguet**, A.

Coe, Grover. Concentrated organic medicines; an exposition of the therapeutic properties, etc., of indigenous and foreign plants. roy. 8°. *New York*, 1858.

COFFEE. Dissertation sur le café. *See* **Gentil**, A. A. P.

——— its history, cultivation and uses. *See* **Hewett**, Robert, *jr.*

——— planter of Ceylon. *See* **Sabonadière**, William.

Coffin, J. H. C. Navigation and nautical astronomy. 12°. *New York*, 1865.

Coffin, James H. Psychometrical tables. **Smiths'n misc. coll., v. 1.**

——— The winds of the northern hemisphere. **Smiths'n contrib., v. 6.**

Coglan's mnemonics, or memory and art, presenting a system or method by the aid of which important events or historical facts may be more readily impressed and retained than by the natural memory alone. Part 1, by H. P. Bradbury. 18°. *Louisville*, 1852. pp. 92.

Cohen, Henry. A catalogue of stationery. 8°. *Philadelphia*, 1859.

Cohen, L. Ph. Tabellen zur Bestimmung der Dimensionen gusseiserner Träger. 8°. *Leipsig*, 1861.

COIFFEUR, The complete. *See* **Lafoy**, J. B. M. D.

COIGNET stone co. *See* **Béton-Coignet.**

COILS, Intensity. How made and used. *See* "**Dyer**".

COINAGE. Ancient and modern coins in the cabinet at the United States mint. *See* **Snowden**, J. R.

——— Handbuch der Münzkunst. *See* **Harzer**, F. **216 Neuer Schauplatz der Künste.**

——— Historical account of American. *See* **Hickcox**, J. H.

——— Manual of gold and silver coins. *See* **Eckfeldt**, J. R., and **Du Bois**, W. E.

——— The royal mint. *See* **Ansell**, George Frederick.

COINS. Coin chart manual. *See* **Thompson**, J.

——— Collection de monnaies de l'Amérique du nord de 1652 à 1858. *See* **Vattemare**, A.

Digitized by Google

COINS, Gold and silver. *See* **Eckfeldt, Jacob R., and Du Bois, W. E.**

——— Münzenvergleichung mit Paritätsberechnung der Gewichte der meisten Länder Europa's und von Nordamerika. *See* **Wolfrum, Gustav Adolf Carl.**

——— of the world. 12°. *Philadelphia*, 1859.

Colange, L. Zell's popular encyclopedia; a universal dictionary of English language, science, literature and art. 2 v. 4°. *Philadelphia*, 1870.

Colburn, Zerah. Gas-works of London. 18°. *London*, 1865.

——— Memoir of; written by himself. 8°. *Springfield*, 1833.

——— Recent practice in the locomotive engine. *See* **Clark, D. K.**

——— and **Holley**, Alexander L. The permanent way and coal-burning locomotive boilers of European railways; with a comparison of the working economy of European and American lines, etc. fol. *New York*, 1858.

COLD, The production of artificial. *See* **Walker, Richard.**

Colden, Cadwallader David. The life of Robert Fulton; comprising some account of the invention, progress, and establishment of steam boats, of improvements in the construction and navigation of canals, etc. 8°. *New York*, 1817.

Cole, George. The contractor's book of working drawings of tools and machines used in constructing canals, railroads, and other works. 4°. *Buffalo*, 1855.

Cole, James E. Rig for reducing and furling sails. 8°. *New York*, 1858. pp. 16.

Cole, Robert. On the origin of spinning by rollers. *See* **French, G. J.** Life of Crompton.

Coleman, Henry. Agriculture and rural economy of France, Belgium, Holland and Switzerland. 8°. *Boston*, 1848.

——— European agriculture and economy; from personal observation. 2d ed. 2 v. 18°. *Boston and London*, 1849.

COLEOPTERA, Classification of North American, by J. L. LeConte. **Smiths'n misc. coll., v. 3.**

——— of Kansas and eastern New Mexico, by J. L. LeConte. **Smiths'n contrib., v. 11.**

Coléra asiatico in Genova. Relazione intorno all'invasione di coléra asiatico in Genova nell'estate ed autunno 1873. Fatta dalla commissione municipale di sanità. Le otto epidemie coleriche di Genova in rapporto colla meteorologia. roy. 8°. *Genova*, 1874.

Coles, Cowper P. English versus American cupolas; a comparison between Coles's and Ericsson's turrets. 8°. *Portsea*, 1861. pp. 11.

Coles, G. An English dictionary; explaining the difficult terms that are used in divinity, husbandry, physick, philosophy, law, navigation, mathematicks, etc. 12°. *London*, 1717.

Coles, L. B. Philosophy of health; natural principles of health and cure, etc. 12°. *Boston*, 1851.

Colin, Alfred. The universal metric system: prepared especially for candidates for schools of science, engineers, and others. 12°. New York, 1876.

Colladon. Dictionnaire de l'industrie. *See* **Baudrimont, A. E., and others.**

Collectio Weigeliana. Die Anfänge der Druckerkunst in Bild und Schrift, an deren frühesten Erzeugnissen in der Weigel'schen Sammlung, erläutert von T. O. Weigel und Ad. Zestermann. 2 v. fol. *Leipzig*, 1866.

Collection du journal La lumière: revue de la photographie. fol. *Paris*, 1851–61.

——— of algæ, diatoms, desmids, fungi, lichens, mosses, Handy book to. *See* **Nave, Johann.**

——— (A) of college words and customs. 12°. *Cambridge*, 1851.

COLLECTIONS of the Rhode Island historical society. *See* RHODE ISLAND.

Collier, John Dyer. An essay on the law of patents for new inventions. To which are prefixed two chapters on the general history of monopolies, and on their introduction and progress in England to the time of the interregnum. With an appendix containing copies of the caveat, petition, oath, and other formulæ, with an arranged catalogue of all the patents granted from January 1, 1800, to the present time. 8°. *London*, 1803.

COLLIERIES. Les houillères en 1867, 1868, 1869, 1872. *See* **Burat, Amédée.**

——— Les houillères en France et en Belgique. *See* **Burat, Amédée.**

——— Winning and working of. *See* **Dunn, M.**

Digitized by Google

Collin. Manuel d'arithmétique; revu par N. R. 18°. *Paris*, 1836. P. 1-2. P. 2 by M. Tremery. **15 Manuels Roret.**

Colling, James K. Gothic ornaments; a series of examples of enriched details and accessories of the architecture of Great Britain. 4°. *London*, 1849-50.

Collins, John. Geometrical dyalling, or dyalling performed by a line of chords onely, or by the plane scale. sm. 4°. *London*, 1659.

COLLISIONS at sea, Regulations for preventing; appendix to Young's nautical dictionary. *See* **Young,** Arthur.

COLLODION processes. *See* **Sutton,** Thomas.

Collot, A. G. A new and improved standard French and English and English and French dictionary. 8°. *Philadelphia*, 1852.

COLONIAL records of New York. *See* **Stevens,** John Austin, *jr.*

COLONIES of Great Britain. Colonial trade. Report of commissioner on foreign affairs. *See* UNITED STATES.

COLORADO. Annual report of the territories for 1873. *See* UNITED STATES. **Interior** department. Geolog. survey. F. V. Hayden.

——— Synopsis of the flora of. *See* UNITED STATES. **Interior** department. Geolog. survey. F. V. Hayden.

COLOR mixer, The. *See* **Sellers,** John.

COLORED fires, Fabrication of. *See* **Dussance,** H.

COLORING, chromatography, etc. *See* **Field,** George.

——— Harmonious; in oil, water and photographic colors. *See* **Newman,** J.

——— Die Technik des Kolorirens und Dekorirens. *See* **Strele,** Karl. **146 Neuer Schauplatz der Künste.**

COLORS. Abridgments English Patents, No. 50.

——— Ancient and modern. *See* **Linton,** William.

——— Chimie des couleurs pour la peinture à l'eau et l'huile. *See* **Lefort, M. J.**

——— Colour and the necessity of a general diffusion of taste. *See* **Wilkinson,** *Sir* J. Gardener.

——— Darstellung der Farbenlehre, und optische Studien. *See* **Dove,** H. W.

——— Dyer and color maker's companion. *See* **Dyer.**

——— Die Fabrication der für die Glasmalerei geeigneten Farben u. s. w. *See* **Schmidt,** C. H. **118 Neuer Schauplatz der Künste.**

COLORS—Continued.

——— Farben-Laboratorium. *See* **Schmidt,** C. H. **117 Neuer Schauplatz der Künste.**

——— Gesetze der Farbenharmonie. *See* **Hay,** D. R. **172 Neuer Schauplatz der Künste.**

——— Harmony and contrast of. *See* **Chevreul,** M. E.

——— Lehrbuch der Farbenfabrikation. *See* **Gentele,** J. G.

——— Manufacture of. *See* **Riffault, M.**

——— The philosophy of permanent. *See* **Bancroft,** Edward.

——— Die Physiologie der Farben für die Zwecke der Kunstgewerbe. *See* **Brücke,** Ernst.

——— varnishes and paints. **Abridgments English Patents, No. 50.**

Colt, Samuel. Application of machinery to the manufacture of rotating chambered-breech fire-arms, and their peculiarities; with an abstract of the discussion upon the paper. Ed. by **Charles Manby.** Excerpt minutes of proceedings of the Institution of civil engineers. v. 11. 8°. *London*, 1854. pp. 40.

Colton, Calvin. Public economy for the United States. 3d ed. 8°. *New York*, 1856.

Colton, George Woolworth. Atlas of the world, illustrating physical and political geography. Letter-press descriptions by R. S. Fisher. 2 v. fol. *New York*, 1856. Another ed., *New York and London*, 1865. Another, 1868.

COLUMBIA College, New York. Catalogue of library of School of mines. *See* NEW YORK (city).

——— District of. Digest of the laws of the. *See* **Thompson,** M.

Columbiani, Placido. Chimney piece maker's assistant. *See* **Milton,** T.

Colwell, Stephen. Commission for revision of revenue system. *See* UNITED STATES. **Treasury** department.

Combes, Charles. Rapport sur le frein automoteur de M. Guérin. *See* **Piobert.**

——— Société d'encouragement pour l'industrie nationale; sur un système de freins automoteurs applicables aux trains qui circulent sur les chemins de fer, par M. Guérin. 4°. *Paris, n. d.* pp. 16.

Digitized by Google

Combes, Charles, and **Viollet,** J. B. Die rauchverzehrenden Oefen. Zugleich auch zur nothwendigen Ergänzung von Peclets "Feuerungskunde", zu dessen "Neuesten Erfindungen", so wie zu Grouvelle's "Dampfmaschinenkunde". *Illus.* 8°. *Weimar,* 1855. **226 Neuer Schauplatz der Künste.**

COMB-MAKING. Handbuch für Kammmacher. *See* **Kühn,** H. **115 Neuer Schauplatz der Künste.**

COMBUSTION, The chemistry of. *See* **Dimond,** E. W.

Comelati, Guglielmo. Dictionary of the Italian and English languages; compiled by. *See* **Baretti,** J.

Comer, George N. Book-keeping rationalized. 45th ed. 12°. *Boston,* 1869.

Comer's navigation simplified; a manual of instruction in navigation as practised at sea, adapted to the wants of the sailor. 8°. *New York,* 1868.

COMETS, Physical constitution of. *See* **Downes,** O. G.

COMMELINACEÆ Indicæ. *See* **Hasskarl,** Carolo.

COMMENTARIES. Henrici Cornelii Agrippæ, in artem brevem Raymundi Lullii Commentaria. *See* **Agrippa,** Henricus Cornelius.

——— on the conflict of laws. *See* **Story,** Joseph.

——— on the constitution of the United States. *See* **Story,** Joseph.

COMMERCE. Account of changes in the commercial system of other nations. *See* UNITED STATES. **State** department.

——— Account of the foreign commerce of the United States from 1820 to 1856. *See* **Homans,** J. S.

——— and navigation of the United States, 1839. *See* UNITED STATES. **Treasury** department.

——— Annales de l'industrie; mémoire sur le. *See* **Le Normand,** L. S., and **Moléon,** J. G. V. de.

——— Ausweise über den auswärtigen Handel Österreichs. *See* AUSTRIA.

——— Commercial and financial legislation of Europe and America. *See* **Macgregor,** J.

——— Commercial class book. *See* **Freese,** John Henry.

——— Commercial relations of the United States with foreign nations. *See* UNITED STATES. **State** department.

COMMERCE. Commercial statistics. *See* **Macgregor,** J.

——— Cyclopedia of. *See* **Homans,** J. S.

——— Cyclopedia of commerce and commercial geography. *See* **Waterston,** W., and **Burton,** J. H.

——— Dictionary of. *See* **Brookes,** R. Universal gazetteer.

——— ——— *See* **McCulloch,** J. R.

——— ——— commercial terms, etc. *See* **Simmonds,** P. L.

——— Dictionnaire du commerce. *See* **Courtin,** E. M. P. M. A. **Encyclopédie** moderne.

——— Dictionnaire de l'industrie commerciale. *See* **Baudrimont,** A., and others.

——— Documens sur le commerce extérieur. *See* FRANCE.

——— Le droit du Sund et le commerce du monde. *See* **Droit du Sund.**

——— Handbuch der Kaufmanns- und Schiffersprache. *See* **Meeden,** C. F.

——— Manual of commercial terms in English and French. *See* **Spiers,** A.

——— Movimento commerciale del regno d'Italia, 1866. *See* ITALY.

——— of the United States, Report from the register of the treasury, June 30, 1851, on. *See* UNITED STATES. **Treasury** department.

——— of the United States, Statistical view of. *See* **Pitkin,** F.

——— of the United States and Mediterranean ports. *See* **Baker,** J. M.

——— railroads, and manufactures of Chicago. 8°. *Chicago,* 1855. pp. 72.

——— Taschenbuch für Kaufleute. *See* **Rothschild,** L.

——— Trade and commerce of the British North American colonies with other countries. *See* UNITED STATES. **Congress.**

——— The universal cambist and commercial instructor. *See* **Kelly,** P.

COMMISSIONER of patents, Decisions of. *See* UNITED STATES. **Interior** department. **Patent** office.

Commissioners of patents' journal. *See* GREAT BRITAIN.

COMMON things, The science of. *See* **Wells,** David A.

——— words with curious derivations. *See* **Smith,** *Archdeacon.*

COMMUNICATION, Treatise upon interior. *See* **Gordon,** A.

Communications received by the New Orleans, Jackson and Great Northern R. R.

Digitized by Google

Communications—Continued.
company, relative to the soil, water, climate, etc. 8°. *New Orleans*, 1867. pp. 40. [2 copies.]

COMPASS disturbance in iron built ships, by G. B. Airy. *See* **Tredgold**, T. **Steam navigation.**

COMPENDIUM of medical science. *See* **Neill**, John, and **Smith**, F. G.

Compleat cook, The; expertly prescribing the most ready wayes, whether Italian, Spanish, or French, for dressing flesh and fish, ordering of sauces, or making of pastry. 24°. *London*, 1658.

Complete confectioner, pastry-cook and baker; with additions and alterations by Parkinson. 12°. *Philadelphia*, 1848.

——— farmer; or, general dictionary of agriculture and husbandry, with descriptions of the most approved implements, machinery, and farm buildings. 5th ed. 2 v. 4°. *London*, 1807.

COMPOSITIONS in outline. *See* **Darley**, Felix.

Compositor's handbook: a guide in the composing room. With appendix of terms, etc. 8°. *London*, 1854.

COMPTES rendus des séances de l'académie. *See* PARIS.

Comstock, Andrew. Phonetic magazine. 2 v. 8°. *Philadelphia*, 1846–47.

——— Phonetic reader. No. 1. 12°. *Philadelphia*, 1853.

——— The phonetic reader: a selection of pieces, classical and moral, in prose and verse. 12°. *Philadelphia*, 1847.

——— A system of vocal gymnastics, a key to the phoneticon; comprising a variety of elementary exercises for developing the voice and improving the articulation. 12°. *Philadelphia*, 1854. pp. 66.

Comte, Auguste. The philosophy of mathematics; translated from the "Cours de philosophie positive" of; by W. M. Gillespie. 8°. *New York*, 1851.

——— Philosophy of the sciences: an exposition of the principles of the "Cours de philosophie positive" of Auguste Comte, by G. H. Lewes. 8°. *London*, 1853. Bohn's scientific library.

CONCAVE glass. Die Praxis der Hohlglas-Fabrikation. *See* **Schur**, Otto.

CONCHOLOGY, Bibliography of North American, by W. G. Binney. **Smiths'n misc. coll., v. 7.**

CONCRETE, and its materials. *See* **Gillmore**, Q. A.

——— Observations on. *See* **Pasley**, C. W.

——— A practical treatise on. *See* **Reid**, Henry.

——— Treatise on concretes. *See* **Burnell**, G. R. **Weale's series, No. 45.**

Condamine, La. Relation d'un voyage, etc. *See* **La Condamine.**

CONDENSATION of steam, Practical treatise on. *See* **Burgh**, N. P.

Condie, D. Francis. A practical treatise on the diseases of children. 8°. *Philadelphia*, 1868.

Condorcet, Jacques Marie de Caritat de. Résistance des fluides. *See* **Alembert**, J. Le R. d'.

Cone, Andrew, and **Johns**, Walter R. Petrolia: a brief history of the Pennsylvania petroleum region; its development, growth, resources, etc., from 1850 to 1869. 8°. *New York*, 1870.

Cone, C. O. Structure and formation of the teeth in man and various animals. *See* **Blake**, Robert. **American library of dental science, v. 2.**

CONFECTIONERY, Art of. *See* **Art** of confectionery.

——— Confectioner's guide. *See* **Schaer**, John F.

——— Le confiseur moderne. *See* **Matchet**, J. J.

——— The Italian confectioner. *See* **Jarrin**, W. A.

——— Manuel du chocolatier, etc. *See* **Baretta**, C. J.

——— Manuel du limonadier et du confiseur. *See* **Cardelli. 59 Manuels Roret.**

——— Preparation of. **Abridgments English Patents, No. 61.**

——— Der Schweizer-Zuckerbäcker. *See* **Perini**, G. **191 Neuer Schauplatz der Künste.**

——— Der vollkommene Conditor. *See* **Eupel**, J. C. **1 Neuer Schauplatz der Künste.**

Congdon, Joseph W. Analytical class-book of botany. *See* **Green**, Francis H.

CONGRESS, Dictionary of the United States. *See* **Lanman**, Charles.

CONGRESSIONAL directory. *See* UNITED STATES. **Congress.**

——— record. *See* UNITED STATES. **Congress.**

Digitized by Google

Congreve, *Sir* William. An analysis of the true principles of security against forgery. 2d ed. 8°. *London*, 1820. pp. 39.

CONIC sections, Elements of. *See* **Simson,** Robert.

—— —— Treatise on. *See* **Hahn,** J. **Weale's series, No. 90.**

CONIFERÆ, A treatise on. *See* **Hoopes,** Josiah.

CONIFEROUS plants; the pinetum. *See* **Gordon,** George.

—— trees; synopsis coniferarum. *See* **Endlicher,** Stephano.

CONJUGIAL love, and its chaste delights. *See* **Swedenborg,** E.

Connell, John. Biographical sketches of distinguished mechanics; originally published in the Delaware state journal, under the signature of "Rittenhouse." 8°. *Wilmington, Del.*, 1852. pp. 68.

Conner, James, and sons, Specimens of printing types and ornaments cast by. fol. *New York*, 1855.

Conolly, John. Cyclopædia of practical medicine, etc. *See* **Forbes,** John.

Consentius, Gustav. Die Dampfkraft durch die Gaskraft ersetzt, oder die neuerfundene Gasmaschine. 8°. *Leipzig*, 1860. pp. 16.

CONSERVATION of energy, The; by Balfour Stewart. **International scientific series, v. 7.**

Conservatoire, Le; revue des arts et métiers, par M. Mathias. 4°. *Paris*, 1850.

Constant-Viguier, Stev. F., and **Langlois-Longueville,** F. P. Manuel de miniature et de gouache, suivi du manuel du lavis à la sépia, et de l'aquarelle. 3e éd. *Illus.* 18°. *Paris*, 1836. **91 Manuels Roret.**

CONSTITUTION of the United States, Commentaries on. *See* **Story,** Joseph.

—— of the United States, A manual of. *See* **Farrar,** Timothy.

CONSTRUCTION, Elements of practical. *See* **Downing,** Samuel.

—— Hochbau-Constructionen in Eisen. *See* **Klasen,** Ludwig.

—— Konstruktions-Lehre. *See* **Aschauer,** J. von.

—— Nouvelles annales de la construction. *See* **Oppermann,** C. A.

—— Principles of; by Gauthey. *See* **Weale's (J.) theory of bridges, v. 1.**

CONSTRUCTION. Rapport sur les matériaux de construction. *See* **Gourlier.**

—— Rules and tables relating to structures. *See* **Rankine,** William John Macquorn.

CONSULAR regulations. *See* UNITED STATES.

—— System. *See* UNITED STATES.

CONSUMPTION curable. *See* **Cornell,** W. M.

—— forestalled and prevented. *See* **Cornell,** W. M.

—— of the lungs. *See* **Yeoman,** T. H.

—— A practical treatise on. *See* **Albee,** F. T.

—— Synopsis of a work upon. *See* **Gregg,** Rollin R.

CONTEMPORARY biography. Dictionnaire des contemporains. *See* **Vapereau,** L. G.

Contemporary review, The. 8 v., 20–28. 8°. *London*, 1872–76——.

CONTINENTAL agriculture. *See* **Coleman,** Henry.

Contractor's book of drawings of tools, etc. *See* **Cole,** G.

—— manual, The. *See* **Clough,** A. Bryant. [3 copies.]

—— pocket book, Engineer and. *See* **Engineer.**

Conversations on gardening; with incidental notes on natural history, by the author of "The elements of botany." 2d ed. 24°. *London*, 1838.

—— sur la chimie; dans lesquelles les élémens de cette science sont exposés d'une manière simple et éclaircis par des expériences; traduites de l'anglais sur la dernière édition, avec des notes et des gravures. T. 1–3. 12°. *Genève*, 1809.

CONVICT-prisons. (England.) *See* GREAT BRITAIN. **Convict** prisons.

CONVICTS. Della reabilitazione de' condannati. *See* **Alianelli,** Niccola.

CONWAY bridge, Tubular bridges, particularly describing the. *See* **Dempsey,** G. D. **Weale's series, No. 43.**

Cook, Frederic. Historical notes of the discovery and progressive improvements of the steam engine. 24°. *New York*, 1849. pp. 44.

Cook, George W. The mariner's physician and surgeon; a guide to the homeopathic treatment of those diseases to which seamen are liable. 24°. *New York*, 1848.

Digitized by Google

Cooke, A. P. A text-book of naval ordnance and gunnery, prepared for the use of the cadet midshipmen, at the United States naval academy. 8°. *New York,* 1875.

Cooke, Josiah P. Elements of chemical physics. 8°. *Boston,* 1860.

Cooke, Josiah P., *jr.* The new chemistry. 12°. *New York,* 1874. **International scientific series, v. 6.**

Cooke, M. C. A fern-book for everybody; containing all the British ferns, with the foreign species suitable for a fernery. 18°. *London,* 1867.

——— Fungi, their nature and uses. Ed. by M. J. Berkeley. 12°. *New York,* 1875. **International scientific series, v. 15.**

——— A manual of botanic terms. 24°. *London,* 1862.

——— One thousand objects for the microscope. 16°. *London,* 1869.

——— A plain and easy account of British fungi. Rev. ed. 16°. *London,* 1866.

COOKERY, American. *See* **Simmons,** Amelia.

——— Art de la cuisson des alimens. *See* **Pelouze, E., Encyclopédie populaire, v. 21.**

——— book, Ladies'. *See* **Hale,** Sarah Josepha.

——— The compleat cook. *See* **Compleat cook.**

——— Cooking, bread-making, and the preparation of confectionery. **Abridgments English Patents, No. 61.**

——— Dictionnaire de la cuisine française. *See* **Dictionnaire.**

——— English. *See* **English** cookery.

——— Every day. Warne's useful books. *See* **Every** day cookery.

——— French domestic. *See* **French.**

——— Handbuch der Kochkunst. *See* **Huth,** F. W. **13 Neuer Schauplatz der Künste.**

——— The London art of. *See* **Farley,** John.

——— London cookery book. *See* **Bishop,** F.

——— Manuel du cuisinier. *See* **Cardelli. 82 Manuels Roret.**

——— The national cook-book. *See* **National cook-book.**

——— The new hydropathic cook-book. *See* **Trall,** R. T.

——— Southern. *See* **Verstille,** *Mrs.* E. J.

COOKERY. What to eat and how to cook it. *See* **Blot,** Pierre.

Cooley, Arnold James. A cyclopædia of six thousand practical receipts, and collateral information in the arts, manufactures and trades, including medicine, pharmacy, and domestic economy. *Illus.* 8°. *New York,* 1846. 3d ed., 1856. [3 copies.]

——— Hand-book of compound medicines, or the prescriber's and dispenser's vade mecum. 16°. *Philadelphia,* 1873.

Cooley, William Desborough. The history of maritime and inland discovery. 3 v. 16°. *London,* 1830. **Lardner's cabinet cyclopædia, v. 60–62.**

Coolidge, Austin J., and **Mansfield,** J. B. A history and description of New England, general and local, in 2 v. v. 1, Maine, New Hampshire, and Vermont. *Illus.* 8°. *Boston,* 1860.

Cooper, Daniel. The microscopic journal and structural record for 1841–42. 2 v. 8°. *London,* 1841–42.

Cooper, Samuel. A dictionary of practical surgery: comprehending all the most interesting improvements, from the earliest times down to the present period; an account of the instruments and remedies employed in surgery, etc. From the sixth London edition, revised, corrected, and enlarged, with numerous notes and additions, embracing all the principal improvements and greater operations introduced and performed by American surgeons, by David M. Reese. 2 v. 8°. *New York,* 1842.

——— The first lines of the practice of surgery: an introduction for students, and a concise book of reference for practitioners. With notes by Alexander H. Stevens and Samuel McClellan. 4th Amer. from the 5th Lond. ed. 2 v. 12°. *Philadelphia,* 1835.

Cooper, Thomas. A practical treatise on dyeing, and callicoe printing; exhibiting the processes in the French, German, English and American practice of fixing colours on woollen, cotton, silk and linen. 8°. *Philadelphia,* 1815.

Cooper, William White. Practical remarks on near sight, aged sight, and impaired vision, with observations upon the use of glasses, and on artificial light. 8°. *London,* 1847.

Digitized by Google

CO-OPERATIVE stores. *See* **Richter**, Eugene.

COOPERING. Art du tonnellier, par A. D. Fougeroux de Boudaroy. PARIS. **Acad. roy. des sc., arts et métiers, v. 7 and 19.**

——— Berechnung und Construction der Fässer. *See* **Seidler**, F. **239 Neuer Schauplatz der Künste.**

——— Die Kunst des Böttchers. *See* **Barfuss**, F. W. **102 Neuer Schauplatz der Künste.**

Cope, Edward D. On the origin of genera. 8°. *Philadelphia*, 1869.

——— Synopsis of the cyprinidæ of Pennsylvania. For the Smithsonian Institution. 4°. *Washington*, 1866.

Cope, F, J. *See* **Both** sides of the grape question.

Cope and Maxwell manufacturing company. *See* **Steam** pumping machinery.

COPPER, Chemistry and metallurgy of. *See* **Piggot**, A. S.

——— Metallurgy of. *See* **Lamborn**, R. H. **Weale's supplementary series, No. 1.**

——— Report on the lake Superior land-district. Part 1. Copper lands. *See* UNITED STATES. **Interior** department.

——— plating. Die Kunst des Vergoldens, Verkupferns, etc. *See* **Schmidt**, C. H. **133 Neuer Schauplatz der Künste.**

COPPERSMITH. Das Kupferschmiedhandwerk. *See* **Höhne**, F., and **Rösling** C. W. **101 Neuer Schauplatz der Künste.**

——— Zeitschrift für Kupferschmiede. *See* **Voigt**, B. F.

COPYRIGHT in design. *See* **Turner**, T.

——— law, Handy-book of. *See* **Fraser**, J.

——— Law of. *See* **Curtis**, G. F.

——— Law of international copyright between England and France. *See* **Burke**, P.

——— laws, etc. *See* **Whitman**, Charles Sidney.

——— of designs. *See* GREAT BRITAIN. **Report** from select committee.

——— of designs for printed fabrics. *See* **Tennent**, J. E.

——— Prussian law of, 1837. *See* **Law** reporter.

——— Statute laws relating to. *See* **Law**, S. D.

——— Treatise on the law of. *See* **Godson**, R.

COPYRIGHTS, Digest of American cases relating to. *See* **Law**, S. D.

Coquelin, Charles. Nouveau traité complet de la filature mécanique du lin et du chanvre; avec 37 planches. Texte, 8°; planches, fol. *Paris*, 1846.

CORAL and coral reefs. **Science lectures for the people, series 2.**

CORDIALS, Hall's distiller, containing instructions for making. *See* **Hall**, Harrison.

——— Manufacture and distillation of alcoholic liquors. *See* **Duplais**, *aîné et jeune.*

Corfe, George. A popular treatise on the kidney; its hitherto unknown functions, and its diseases in connection with the circulating animal oils, etc. 8°. *London*, 1839.

Coriolés, Gaspard Gustave. Dictionnaire de l'industrie. *See* **Baudrimont**, A., and others.

CORK, Cutting and preparing; bottling liquids, securing and opening bottles, etc. **Abridgments English Patents, No. 56.**

Cormack, John Rose. A treatise on the chemical, medicinal and physiological properties of creosote; being the Harveian prize dissertation for 1836. 8°. *Edinburgh*, 1836.

Cornell, William M. Consumption curable, and its treatment. 18°. *Boston*, 1850.

——— Consumption forestalled and prevented. 18°. *Boston*, 1846.

CORN laws, Remarks on the. *See* **Tooke**, T. **History** of prices.

CORNWALL. Domesday book, Cornwall; photozincographed. *See* GREAT BRITAIN.

——— Royal polytechnic society. Annual report. *See* FALMOUTH.

Corréard, J. Journal des armes spéciales; publiée par. *See* **Journal.**

CORRELATION of vital and physical forces, by George F. Barker. **University series, v. 2.**

CORRESPONDENCE, Commercial. *See* **Schiebe**, Auguste.

——— Manual of commercial, in English and French; or selection of commercial phrases taken from a number of letters, accounts, catalogues, prices current, and other papers; by a merchant. 12°. *New York*, 1850.

CORROSION of leaden pipes by water. *See* **Science**, miscellaneous.

Digitized by Google

CORTAZAR, Juan. Tratado de trigonometria y topografia. 15th ed. 8°. *Madrid*, 1875.

CORTEX salicis latifoliæ. *See* **Wilkinson**, G.

Coryton, John. A treatise on the law of letters-patent, for the sole use of inventions in the United Kingdom of Great Britain and Ireland; including the practice connected with the grant: to which is added a summary of the patent laws in force in the principal foreign states; with an appendix of statutes, rules, practical forms, etc. 8°. *London*, 1855.

COSMOGONY, or the mysteries of creation. *See* **Davies**, Thomas.

COSMOLOGY, Rational. *See* **Hickok**, Laurens P.

COSMOS, Annuaire de. *See* **Annuaire**.

——— The dental. *See* **Dental** cosmos.

——— Physical description of the universe. *See* **Humboldt**, F. H. A. von.

——— Revue encyclopédique hebdomadaire des progrès des sciences. 3e séries; 32 vols. 1e série, T. 1–25, 1852–64; 2e série, T. 1–6, 1865–67; 3e série, T. 1–3, 1867–68. [T. 2 and 5, 2e série, imperfect.] 8°. *Paris*, 1852–68.

Coste. Voyage d'exploration sur le littoral de la France et de l'Italie. Rapport à M. le ministre de l'agriculture, du commerce et des travaux publics. 4°. *Paris*, 1855.

Coste, Jean Jacques M. C. V. Commission de pisciculture; rapport de. *See* FRANCE.

——— Instructions and report on fish-breeding. *See* **Fry**, W. H.

——— La pisciculture, etc.; introduction par. *See* **Jourdier**, A.

COSTUME. Corset and crinoline. *See* **L.**, W. B.

——— History of British costume. *See* **Planché**, J. R.

——— of China. *See* **Mason**, George Henry.

——— of the ancients. *See* **Hope**, Thomas.

COSTUMES, Select historical. *See* **Hinton**, Henry L.

Cotsell, George. A treatise on ships' anchors. *Illus.* 12°. *London*, 1856. **Weale's series, No. 106.**

Cotta, Bernhard von. A treatise on ore deposits; transl. from 2d German ed. by Frederick Prime, jr. 8°. *New York*, 1870.

COTTAGE, farm and villa architecture and furniture. *See* **Loudon**, J. C.

COTTAGES, Designs for. *See* **Walter**, T. U., and **Smith**, J. J.

——— Instructions for the building of. *See* **Wilds**, William.

Cottingham, L. N. The smith's, founder's, and ornamental metal worker's director. Comprising a variety of designs in the present taste for gates, piers, balcony railings, window guards, verandas, balustrades, vases, etc. fol. *London*, 1823. 2d ed., 1824, entitled "The smith and founder's director".

COTTOIDS, A monograph of. *See* **Girard**, Charles.

COTTON and tobacco, The history and cultivation of. *See* **De Coin**, Robert L.

——— bale ties, Digest of. *See* **Sinsabaugh**, L. W., and **Tipton**, T. C.

——— cultivation. *See* **Gibbs**, Joseph.

——— culture. *See* **Lyman**, Joseph B.

——— culture and the south. *See* **Loring**, F. W., and **Atkinson**, C. F.

——— History of. *See* **History**.

——— machinery, Improvements in. *See* **Draper**, George, and son.

——— manufacture, Handbook of. *See* **Geldard**, James.

——— manufacture. Handbuch der Baumwollen-Manufactur. *See* **Ure**, A. **93 Neuer Schauplatz der Künste.**

——— ——— Handbuch der Baumwollenweberei. *See* **Schmidt**, C. H. **135 Neuer Schauplatz der Künste.**

——— ——— History of. *See* **Guest**, Richard.

——— ——— History of, in England and America. *See* **White**, G. S. Memoir of S. Slater.

——— ——— History of, in Great Britain. *See* **Baines**, E., *jr.*

——— ——— Lehrbuch des Bleichens und der Färberei der Baumwolle. *See* **Geest**, F. A. W. **141 Neuer Schauplatz der Künste.**

——— ——— Manager's assistant. *See* **Snell**, D. W.

——— ——— of Great Britain. *See* **Ure**, A.

——— ——— of the United States, Detail of. *See* **Montgomery**, J.

——— ——— Practical cotton spinner and manufacturer. *See* **Scott**, Robert.

——— spinning. The American cotton spinner. *See* **Baird**, Robert H.

——— ——— Die Baumwollen-Spinnerei. *See* **Niess**, Benno. **288 Neuer Schauplatz der Künste.**

——— ——— The cotton spinner's manual. *See* **Montgomery**, James.

Digitized by Google

COTTON spinning. Der Führer des Baumwollenspinners. *See* **Niess**, Benno.

——— ——— Technik der Baumwollenspinnerei. *See* **Hülsse**, J. A.

——— ——— Theory and practice of. *See* **Theory** and practice of cotton spinning.

——— ——— Traité complet de la filature du coton. *See* **Alcan**, M.

——— trade, A handbook of the. *See* **Ellison**, T.

——— ——— of Great Britain. *See* **Mann**, J. A.

——— velvet. Art du fabricant de velours de coton, par J. M. Roland de la Platière. PARIS. **Acad. roy. des sc., arts et métiers, v. 30 and 19.**

——— ——— Fabrication du velours de coton. *See* **Gand**, Édouard.

Couche, Charles. Rapport sur le frein automoteur de M. Guérin. *See* **Piobert, Combes**, C., and **Couche**, C.

Coues, Samuel Elliott. Outlines of a system of mechanical philosophy; being a research into the laws of force. 8°. *Boston*, 1851.

——— Studies of the earth; an essay on the figure and surface-divisions of the earth, its geological and meteorological phenomena and its astronomical elements. 4°. *Washington*, 1860. pp. 98.

Coulvier-Gravier, M. Recherches sur les météores et sur les lois qui les régissent. 8°. *Paris*, 1859.

COUNTERFEITS. How to detect counterfeit bank notes. *See* **Peyton**, G.

——— How to detect counterfeit bank notes. *See* **Rawdon**, Wright, Hatch and Edson.

COUNTERPOISE gun-carriages and platforms. *See* **King**, W. R.

Country gentleman (The), a journal for the farm, the garden, and the fireside. v. 1-26, 1853-65. Continued under the name of "The cultivator and country gentleman." fol. *Albany*, 1853-65.

——— gentleman's magazine. 1st series, v. 1-10, 1868-73. 2d series, v, 11-16, 1873-76. 8°. *London*, 1868-76——.

——— houses, The architecture of. *See* **Downing**, A. J.

——— rambles in England; or journal of a naturalist, by Knapp, with notes and additions by the author of "Rural hours," Miss S. F. Cooper. 12°. *Buffalo*, 1853.

——— residences. *See* **Loudon**, John.

Country seats, Designs for. *See* **Holly**, H. H.

Cours complet d'agriculture, d'économie rurale et de médecine vétérinaire, par nos premiers professeurs, etc. Avec environ 4000 sujets gravés sur acier. 4e éd. T. 1-20. 8°. *Paris*, 1846.

——— de dessin linéaire appliqué à la mécanique, ou collection des machines les plus intéressantes et les plus utiles; accompagnées de notices descriptives et précédées d'une introduction sur les principes généraux de la mécanique. l. 4°. *Paris, n. d.*

——— élémentaire de comptabilité agricole. 18°. *Bruxelles*, 1849. **Bibliothèque rurale**, 1st series, No. 3.

——— élémentaire d'histoire naturelle. *See* **Beudant**, M. F. S.

COURT-hand restored. *See* **Wright**, Andrew.

Courtenay, Edward H. A treatise on the differential and integral calculus, and on the calculus of variations. 8°. *New York*, 1855.

Courtenay, Thomas Peregrine. Lives of British statesmen. *See* **Mackintosh**, *Sir* J. **Lardner's cabinet cyclopædia, v. 76-82.**

Courtin. Dictionnaire des langues française et allemande, par Courtin et autres. *See* **Moxin**, D. J.

Courtin, Eustache M. P. M. A. Encyclopédie moderne; dictionnaire abrégé des sciences, des lettres, des arts, de l'industrie, de l'agriculture et du commerce. Nouvelle edition. T. 1-27. Atlas, T. 1-3. 8°. *Paris*, 1846-53. Complément publié sous la direction de MM. Noël Des Vergers, etc. T. 1-12. 1856-62. Also Planches du complément.

Courtivron, Gaspard, *Le Compasseur de* Créqui-Montfort, *Marquis* de. Art d'adoucir le fer fondu, par Réaumur. PARIS. **Acad. des sc., arts et métiers, v. 8 and 2.**

——— and **Bauchu,** É. J. Art de forges et fourneaux à fer. PARIS. **Acad. roy. des sc., arts et métiers, v. 6 and 1.**

Cousin, Victor. Course of the history of modern philosophy. Translated by O. W. Wight. 2 v. 8°. *New York*, 1853.

Courtejean, Charles. Étude et diagnoses de 144 mollusques kimméridiens inédits. *See* MONTBELIARD. **Compte rendu de la Société d'émulation.**

Digitized by Google

COW, The; dairy husbandry and cattle breeding. *See* **Saxton's rural handbooks, v. 1.**

——— The milk. Choix des vaches laitières. *See* **Magne**, J. H.

——— Milch cows and dairy farming. *See* **Flint**, C. L.

Cowan, Frank. Curious facts in the history of insects; including spiders and scorpions; a complete collection of legends, superstitions, beliefs and ominous signs connected with insects. 12°. *Philadelphia*, 1865.

Cowell, Samuel H. A brief description of the art of anastatic printing, as practised by. With full directions and illustrative specimens. 8°. *Ipswich*, *n. d.* pp. 8.

Cowperthwaite, George E. H. A. Burr et al. vs. Opinion. *See* **Ingersoll**, C. A.

Cox, Frederick. A compendium of photography, containing simple and concise directions for the collodion, albumenized, waxed paper, and dry collodion processes, with instructions for taking stereoscopic pictures, and the method of colouring photographs. 3d ed. 16°. *London*, 1856. pp. 50.

Cox, Homersham. A rudimentary treatise on the integral calculus. 12°. *London*, 1852. **Weale's series No. 102.**

Cox, Rowland. American trade mark cases. A compilation of all the reported trademark cases decided in the American courts prior to 1871; with appendix containing the leading English cases. 8°. *Cincinnati*, 1871.

Coxe, Edward Jenner. Domestic medicine, or medical vade mecum; a safe companion and guide for families, planters, commanders of ships or steamers. 12°. *New Orleans*, 1854.

——— Medical vade mecum, adapted for the use of families, ships and steamers; embracing a concise account of the more important medicines, and the proper treatment of the principal diseases and accidents to which the human body is liable. To which is added the best manner of preparing articles of diet for convalescents. 12°. *New Orleans*, 1846.

——— A practical treatise on medical inhalation, or the direct and local application of remedies to the air passages, etc. 3d ed. 18°. *Philadelphia*, 1854.

Coxe, William. A view of the cultivation of fruit trees, and the management of orchards and cider; with accurate descriptions of the most estimable varieties of native and foreign apples, pears, etc., cultivated in the middle states. 8°. *Philadelphia*, 1817.

Coyle, Fitzhugh. Descriptive catalogue of the national agricultural, horticultural and seed warehouse. 8°. *Washington*, 1849. pp. 64.

Crabb, George. English synonymes, with copious illustrations and explanations. 8°. *New York*, 1831.

——— Universal technological dictionary, illustrated by plates, diagrams, cuts, etc. 2 v. 4°. *London*, 1823. Another copy, 1851.

Craddock, Thomas. The chemistry of the steam-engine practically considered; with a description of the patent universal condensing steam-engine. *Illus.* 8°. *London*, 1847. pp. 92 and 40.

Craig, A. R. The book of the hand, or the science of modern palmistry, chiefly according to the systems of D'Arpentigny and Desbarrolles, with some account of the gipsies. 8°. *London*, 1867.

Craig, Benjamin Faneuil. Rifled field pieces: a short compilation of what is known of the new field artillery of Europe, with some account of our own. 8°. *Washington*, 1862. pp. 32.

——— Weights and measures according to the decimal system, with tables of conversion for commercial and scientific uses. 18°. *New York*, 1867. pp. 49.

Craig, John. Universal etymological, technological, and pronouncing dictionary of the English language, embracing all the terms used in arts, science, and literature. 2 v. 8°. *London*, 1852.

Craik, George L. The English of Shakespeare; illustrated by a philological commentary on his Julius Cæsar. From 3d rev. Lond. ed. by W. J. Rolfe. 12°. *Boston*, 1867.

Cramer, Carl. Byzantinische Dekorationen für Zimmermaler; entworfen und gezeichnet von. *Illus.* 1-3 Heft. 4°. *München*, 1846.

Cramer, John Andrew. Elements of the art of assaying metals; in two parts. 1st, the theory, 2d, the practice of the said art. Written originally in Latin, with

Digitized by Google

Cramer, John Andrew—Continued. notes and observations, by Cromwell Mortimer. 2d ed. 8°. *London*, 1764.

Crampton, T. Steam navigation; appendixes A and B, by. *See* **Tredgold,** T.

CRANBERRY, Cultivation of. *See* **Eastwood,** B.

Cranch, William. Opinions on appeals from the decisions of the commissioner of patents. *See* UNITED STATES. **Interior** department. Patent office.

Crane, Breed & co. Illustrated catalogue and price list of patent metallic burial cases and caskets. fol. and 4°. *Cincinnati, O.* [3 copies.]

CRANES, Construction of. *See* **Glynn, J. Weale's series, No. 33.**

CRAVEN, The dialect of. *See* **Dialect.**

CREATION, or the Bible and geology consistent. *See* **Murphey,** James.

——— Sketches of. *See* **Winchell,** Alexander.

Crelle, August Leopold. Girard'sche Schiffschleuse; Anmerk. v. *See* **Poncelet,** J. V.

——— Mémoires sur les différentes manières de se servir de l'élasticité de l'air atmosphérique comme force motrice sur les chemins de fer. Avec 6 planches. 4°. *Berlin*, 1846.

CREOSOTE, A treatise on. *See* **Cormack,** John Rose.

Cresswell, D. Venturoli's elements of the theory of mechanics, translated by. *See* **Venturoli,** Giuseppe.

Crestadoro, A. Catalogue of the free library of Manchester. *See* MANCHESTER.

Cresy, Edward. An encyclopedia of civil engineering, historical, theoretical, and practical. *Illus.* 2 v., with supp. . 8°. *London*, 1847-56.

Creuze, Augustin F. B. Treatise on naval architecture. *See* **Murray,** A. **Ship** building.

CRICKET and football. *See* **Beadle's** dime handbooks, v. 3.

——— its theory and practice. *See* **Chambers'** useful handbooks, v. 3.

CRIMINAL statistics of the grand duchy of Baden. *See* BADEN.

CRITICISM. Zur Kritik der roemischen Archäologie des Dionysius von Halikarnass. *See* **Kiessling,** Adolf.

Crittenden, S. W. An inductive and practical treatise on book-keeping by single and double entry. roy. 8°. *Philadelphia*, 1857.

Crittenden, S. W. Key to the counting-house and high-school editions of Crittenden's book-keeping; rev. by S. H. Crittenden. roy. 8°. *Philadelphia*, 1857.

CROATIA. Die Vegetationsverhältnisse von Croatien. *See* **Neilreich,** August.

CROCHET, Book of. *See* **Riego de la Branchardière,** E.

——— fancy knitting and needlework, Ladies' guide to. *See* **Stephens,** *Mrs.* Ann S.

——— work, Assistant in. *See* **Gaugain,** *Mrs.* J.

——— work, Book of. *See* **Ladies' library.**

——— work, Patterns for. *See* **Original** and selected patterns.

Croft, Henry. Chemical gazette; conducted by. *See* **Chemical.**

Croll, James. Climate and time in their geological relations; a theory of secular changes of the earth's climate. 8°. *New York*, 1875.

Croly, George. Paper and paper making; introduction by. *See* **Herring,** R.

Crompton, Samuel. Life and times of. *See* **French,** G. J.

Crookes, William. Chemical news, ed. by. *See* **Chemical** news.

——— A hand-book to the waxed paper process in photography. 8°. *London*, 1857. pp. 55.

——— Journal of the photographic society, ed. by. *See* LONDON. **Photographic** society.

——— The photographic news, ed. by. *See* **Photographic** news.

——— A practical hand-book on dyeing and calico-printing. 8°. *London*, 1874.

CROQUET, as played by the Newport croquet club. By one of the members. 18°. *New York*, 1865. pp. 52.

——— Book of. *See* **Beadle's** dime handbooks, v. 2.

——— its principles and rules, for the lawn and parlor, by A. Rover. 24°. *Springfield, Mass.*, 1866. pp. 52.

——— and troco. *See* **Chambers's** useful hand-books, v. 1.

Cross, Jeremy L. The true masonic chart, or hieroglyphic monitor. 12°. *New York*, 1851.

CROTON aqueduct, Memoir of the. *See* **King,** C.

Croucher, J. H., and **Le Gray,** Gustave. Plain directions for obtaining photographic pictures by the calotype and en-

Digitized by Google

Croucher and Le Gray—Continued ergiatype, also, upon albumenized paper and glass, by collodion and albumen, etc. *Illus.* 12°. *Philadelphia*, 1853.

Crowe, Eyre Evans. The history of France. 3 v. 16°. *London.* **Lardner's cabinet cyclopædia, v. 19–21.**

——— Lives of foreign statesmen; by. *See* **James, G. P. R. Lardner's cabinet cyclopædia, v. 83–87.**

Crowgey, Robert. Universal calculator, and general international accountant; containing a table of algorisms or series of numbers in duplex arithmetical progression. 8°. *London*, 1827.

Crump, William H. The world in a pocket-book, or universal popular statistics. 8th ed. 12°. *Philadelphia*, 1858.

Crunden, John. Chimney piece maker's assistant. *See* **Milton, T.**

CRUSTACEA. Beitrag zur Kenntniss der Ostracoden. *See* **Fischer, S.**

CRYPTOGAMIC flora, Scottish. *See* **Greville, Robert Kaye.**

CRYSTAL palace (*London*). Its architectural history and constructive marvels. *See* **Berlyn, P., and Fowler, C., *jr.***

——— palace (*London*) library. Official handbooks. 3 v. 8°. *London*, 1854.

CONTENTS.

v. 1. Egyptian court.—O. Jones and J. Bonomi. Apology for the coloring of the Greek court.—O. Jones and J. Bonomi. Greek court.—G. Scharf. Roman court.—G. Scharf. Alhambra court.—O. Jopes. Nineveh court.—A. H. Layard.

v. 2. Italian court.—M. D. Wyatt. Renaissance court.—M. D. Wyatt. Mediæval court.—M. D. Wyatt. Byzantine court.—M. D. Wyatt. Catalogue of modern sculptors.—Mrs. A. Jameson.

v. 3. Palace and park.—S. Phillips. Portrait gallery.—S. Phillips. Ethnology and natural history.—R. G. Latham and E. Forbes. Extinct animals.—R. Owen. Pompeian court.—G. Scharf.

——— palace (*New York*). *See* NEW YORK.

CRYSTALLINE and molecular forces. **Science lectures for the people, series 6.**

CRYSTALLOGRAPHY. Cristallographie; ou description des formes propres à tous les corps du règne minéral. *See* **De Romé de l'Isle.**

——— Science of, by J. Tennant and W. Mitchell. *See* **Ansted, D. F. Orr's circle of the sciences, v. 4.**

——— System of. *See* **Griffin, John Joseph.**

Crženschtik, F. Katechismus der Farbenharmonik, oder die Elemente der Chromatik nach dem neuesten Stande der Optik in populärer Fassung. 12°. *Wien*, 1871. pp. 44.

CULINARY affairs of the old English. *See* **Warner, Richard.**

Cullen, William. A practical treatise on the construction of the turbine, or horizontal water-wheel. *Illus.* 4°. *London*, 1860. pp. 21.

Cullerier, M. A. Atlas of venereal diseases; transl. from the French, with notes by Freeman J. Bumstead. 4°. *Philadelphia*, 1868.

Culley, R. S. A handbook of practical telegraphy. *Illus.* 8°. *London*, 1863, and *New York*, 1870.

Cullum, George W. Biographical register of the officers and graduates of the military academy at West Point, N. Y., from its establishment, March 16, 1802, to the army re-organization of 1866–67. v. 2. 1841–67. *New York*, 1868. [v. 1 wanting.]

——— Elements of military art; transl. by. *See* **Delabarre-Duparcq, N. E.**

——— Military bridges; by. *See* UNITED STATES. **Papers** on engineering.

Culpeper, Nich. The English physitian, enlarged, with three hundred, sixty and nine medicines made of English herbs, that were not in any impression until this. The epistle will inform you how to know this impression from any other. 12°. *London*, 1653.

Cultivator, The; a monthly journal for the farm and the garden, devoted to agricultural and rural improvement. *Illus.* 1st series, v. 1–10, 1834–43; 2d series, v. 1–9, 1844–52; 3d series, v. 1–12, 1853–64. v. 1, 1st series, was published by New York state agricultural society, conducted by J. Buel, J. P. Beekman, and J. D. Wasson. v. 2–6 by J. Buel. v. 7–10, consolidation of Buel's cultivator and Genesee farmer, ed. by W. Gaylord and L. Tucker. 2d and 3d series ed. by L. Tucker and Tucker and son. 8°. *Albany*, 1834–64. [1st series, 4°, fol.]

——— The, and country gentleman; devoted to the practice and science of agriculture and horticulture at large, and to all the various departments of rural and domestic economy; continued from "The coun-

Digitized by Google

Cultivator—Continued.
try gentleman." v. 27–41, 1866–76. 4° and fol. *Albany*, 1866–76——.

——— The tongueless. *See* **Pattée's** patent.

CULTURE demanded by modern life, The. *See* **Youmans**, E. L.

CULVERTS, Specimens of. *See* **Duggan**, G.

Cumberland, Richard, Memoirs of, written by himself, containing an account of his life and writings; with notes by Henry Flanders. 8°. *Philadelphia*, 1856.

Cumming, Alexander. The elements of clock and watch-work, adapted to practice. In two essays. 4°. *London*, 1766.

Cummings, Thomas S. Historic annals of the National academy of design, New York drawing association, etc.; with occasional dottings by the way-side from 1825 to the present time. 8°. *Philadelphia*, 1865.

Cundall, Joseph. Ornamental art applied to ancient and modern bookbinding. *Illus.* 4°. *London*, 1848. pp. 15.

——— The photographic primer for the use of beginners in the collodion process. 16°. *London*, 1854. pp. 31.

Cunningham, Allan. The lives of the most eminent British painters, sculptors and architects. 2d ed. 6 v. 12°. *London*, 1830.

Cunningham, Henry Duncan Preston. Self-reefing topsails; invented by. *See* **Kipping**, R.

CUPOLAS, English versus American. A comparison between Coles's and Ericsson's turrets. *See* **Coles**, C. P.

Curieuse et admirable découverte du mouvement perpétuel, de la quadrature du cercle, de la pierre philosophalle et de la longitude, etc.; par M. Mrs. les respectables et savans mathématiciens françois. 12°. *Gibraltar*, 1738.

Curioni, Giulio. Sui prodotti greggi e lavorati delle industrie estrattive, relazione di. 8°. *Firenze*, 1869.

Curiosités des inventions et découvertes. 24°. *Paris*, 1855.

Curiosities, Novelties, inventions and. *See* **Novelties.**

——— of animal life, with the recent discoveries of the microscope. LONDON. **The Religious** tract society.

Curr, John. Railway locomotion and steam navigation: their principles and practice. 8°. *London*, 1847.

CURRENCY, Articles on the. *See* **Mason**, C.

——— Domestic. *See* **Suggestions** for a domestic currency.

CURRENTS. Wind and current charts, Explanations of. *See* **Maury**, M. F.

Currey, F. Natural history review; ed. by. *See* **Natural** history.

CURRYING. Art du corroyeur, par J. J. Le F. de La Lande. PARIS. **Acad. des sc., arts et métiers, v. 3 and 38.**

——— Art of. *See* **Julia de Fontenelle**, J. S. E., and **Malepeyre**, F.

CURSUS mathematicus. *See* **Leybourn**, William.

Curtis, George Ticknor. The inventor's manual of legal principles, and guide to the patent office. 12°. *Boston*, 1851.

——— Life of Daniel Webster. 2 v. 3d ed. 8°. *New York*, 1870.

——— A treatise on the law of copyright in books, dramatic and musical compositions, etc.; as enacted and administered in England and America: with some notices of the history of literary property. 8°. *Boston*, 184[illegible]. [2 copies.]

Curtis, George William. Rural essays; ed. by. *See* **Downing**, A. J.

Curtis, John. Farm insects; the natural history and economy of the insects injurious to the field crops of Great Britain and Ireland, and also those which infest barns and granaries; with suggestions for their destruction. *Illus.* 8°. *Glasgow*, 1860.

CURVES for railroads. *See* **Trautwine**, John C.

——— Theorie der Curven doppelter Krümmung. *See* **Schell**, W.

CURVILINEAR figures, Species and magnitude of. *See* **Newton**, Isaac.

——— perspective of nature. *See* **Herdman**, William G.

Cushing, Luther S. An introduction to the study of the Roman law. 8°. *Boston*, 1854.

Cutbush, James. The American artist's manual; or dictionary of practical knowledge in the application of philosophy to the arts and manufactures. Selected from the most complete European systems, etc. *Illus.* 2 v. 8°. *Philadelphia*, 1814.

——— A system of pyrotechny, comprehending the theory and practice, with

Digitized by Google

Cutbush, James—Continued.
the application of chemistry. 8°. *Philadelphia*, 1825.

CUTLERY. Art du coutelier, par J. J. Perret. PARIS. **Acad. roy. des sc., arts et métiers, v. 9–11.**

—— Art du coutelier ou ouvrages communs; par A. D. Fougeroux de Bondarory. PARIS. **Acad. des sc., arts et métiers, v. 11 and 14.**

—— Kunst des Messerschmiedes. *See* **Landrin,** M. H. **85 Neuer Schauplatz der Künste.**

—— Manuel du coutelier. *See* **Landrin,** M. H. **52 Manuels Roret.**

Cuvier and zoology. A popular biography, with an historical introduction and sequel. 24°. *London*, 1844.

Cuyper, Ch. de. Revue de l'exposition de 1867; publiée par la Revue universelle des mines, de la métallurgie, des travaux publics, des sciences et des arts, appliqués à l'industrie. T. 23 et 24 bis. 1r–2e livraisons. 8°. *Paris*, 1868. [An odd volume.]

CYPHERS, Knight's new book of. *See* **Knight,** F.

CYPRINIDÆ of Pennsylvania. *See* **Cope,** Edward D.

Czermak, Johannes N. Der electrische Doppelhebel. Eine Universal-Contact-Vorrichtung zur exacten Markirung des Momentes in welchem eine beliebige Bewegung beginnt oder ihre Richtung ändert. roy. 8°. *Leipzig*, 1871.

D., M. Manuel du praticien ou traité de la science du droit, suivi d'un dictionnaire administratif abrégé; par M. D. 3e éd. par L. Roudouneau. 18°. *Paris*, 1834. **1 Manuels Roret.**

Da Costa, J. M. Inhalations in the treatment of diseases of the respiratory passages, particularly as effected by the use of atomized fluids. 12°. *Philadelphia*, 1867.

—— Medical diagnosis, with special reference to practical medicine. 2d ed. rev. 8°. *Philadelphia*, 1866.

Dadd, George H. The anatomy and physiology of the horse, with anatomical and questional illustrations, etc., to which is added a glossary of technicalities, toxicological chart, and dictionary of veterinary science. roy. 8°. *Boston*, 1867.

Daddow, Samuel H., and **Bannan,** Benjamin. Coal, iron and oil: or, the practical American miner. A plain and popular work on our mines and mineral resources; and a text-book or guide to their economical development. 8°. *Pottsville*, 1866.

Dagron. Traité de photographie microscopique. 8°. *Paris*, 1864. pp. 36.

Daguerre, Louis Jacques Maudé. Historique et description des procédés du daguerréotype et du diorama, rédigés par Daguerre. Augmentés de notes et d'observations par MM. Lerebours et Susse frères. 8°. *Paris*, 1839. pp. 86.

Daguerreotype, The. A magazine of foreign literature and science: compiled chiefly from the periodical publications of England, France and Germany. v. 1–3, 1847–49. 8°. *Boston*, 1847–49.

—— Hand-book of. *See* **Humphrey,** S. D.

—— Hints on the. *See* **Croucher,** J. H.

—— Humphrey's journal on the. *See* **Humphrey's.**

—— operator, The. *See* **Haley,** W. S.

—— Procédés du daguerréotype. *See* **Daguerre,** S. J. M.

—— Process of. *See* **Humphrey,** S. D.

—— Résumé du daguerréotype. *See* **Gaudin,** M. A.

—— Treatise on. *See* **Hill,** Levi L.

Daguin, P. A. Traité élémentaire de physique, théorique et expérimentale, avec les applications à la météorologie et aux arts industriels. 4 v. 8°. *Toulouse et Paris*, 1867–68.

Dahlgren, John A. Boat armament of the United States navy, designed by, and executed under the direction of J. A. Dahlgren. 8°. *Philadelphia*, 1852. 2d ed., 1856.

—— Ordnance memoranda, naval percussion locks and primers, particularly those of the United States. 12°. *Philadelphia*, 1853.

—— Report on the thirty-two pounder of thirty-two cwt. 8°. *Washington*, 1850.

—— Shells and shell-guns. 8°. *Philadelphia*, 1857.

DAHLIA, The. *See* **Johnson,** George W.

DAINTY dishes. *See* **St. Clair,** Harriett.

DAIRY farming. Die holländische Milchwirthschaft. *See* **Ellerbrook,** I. J.

—— —— Milch cows and. *See* **Flint,** C. L.

Digitized by Google

DAIRY husbandry. Harleian dairy system and the methods pursued by the Dutch. *See* **Harley**, W.

——— ——— La laiterie. *See* **R.-J.**, Le. **Encyclopédie populaire, v. 19.**

——— ——— Manuel de la laiterie. *See* **Thiébaut-de-Berneaud, A. 112 Manuels Roret.**

DAKOTA language, Grammar and dictionary of. By S. R. Riggs. **Smiths'n contrib., v. 4.**

Daléchamps, L. Manuel populaire et classique des poids et mesures, adopté par le ministre de la guerre. 12°. *Paris, n. d.*

Dallas, W. S. Natural history of animals. *See* **Smith**, E. **Orr's circle of the sciences, v. 2, 3.**

Dalton, John, and his atomic theory. *See* **Roscoe. Science lectures for the people, series 6.**

——— Memoirs of. *See* **Henry**, W. C. **Cavendish society publications.**

——— meteorological observations and essays. 2d ed. 8°. *Manchester*, 1834.

Dalton, John C. A treatise on human physiology; designed for the use of students and practitioners of medicine. 5th ed. 8°. *Philadelphia*, 1871.

Dalziel, Edward. The home book. *See* **Valentine**, R.

Dambach, Otto. Das Patentgesetz für das deutsche Reich, erläutert von. 16°. *Berlin*, 1877.

Damon, Howard F. The structural lesions of the skin, their pathology and treatment. 8°. *Philadelphia*, 1869.

Dana, Charles Anderson. New American cyclopædia. *See* **Ripley**, G., and **Dana**, C. A.

Dana, David D. The fireman; the fire departments of the United States, with a full account of all large fires, etc. *Illus.* 12°. *Boston*, 1858.

Dana, James Dwight. Manual of geology; treating of the principles of the science, with special reference to American geological history. *Illus.* 8°. *Philadelphia*, 1863.

——— A system of mineralogy; comprising the most recent discoveries; descriptions of species and their localities, chemical analyses and formulas, tables for the determination of minerals, treatise on mathematical crystallography and the drawing of figures of crystals. *Illus.* 4th ed. enlarged. v. 1, 2. 8°. *New York*, 1854. 5th ed., 1868.

Dana, James Dwight—Continued.

Dana, James Freeman. An epitome of chemical philosophy. 8°. *Concord, N. H.*, 1825.

Dana, R. H., *jr.* The seaman's friend, containing a treatise on practical seamanship, with plates, a dictionary of sea terms, customs and usages of the merchant service, etc. 6th ed. 18°. *Boston*, 1851.

Dana, Samuel L. Lead diseases. *See* **Tanquerel des Planches**, L.

——— Muck manual for farmers. A treatise on the physical and chemical properties of soils; the chemistry of manures; including also composts, artificial manures, and irrigation. 5th ed. With a new chapter on bones and superphosphates. 12°. *New York*, 1865.

Dandolo, *Count.* The art of rearing silkworms. Transl. from the work of Count Dandolo. 12°. *London*, 1825.

Danforth, A. H. The science of practical horsemanship; or, an entirely new and improved system of managing and training the horse, together with a description of its diseases and treatment. 24°. *Montpelier, Vt.*, 1860.

Danger, T. P. L'art du souffleur à la lampe; ou moyen facile de faire soi-même, à très peu de frais, tous les instrumens de physique et de chimie qui sont du ressort de cet art. 12°. *Paris et Bruxelles*, 1829.

Daniell, John Frederic. Elements of meteorology; being the 3d ed. of meteorological essays. 2 v. 8°. *London*, 1845.

——— An introduction to the study of chemical philosophy: a preparatory view of the forces which concur to the production of chemical phenomena. 2d ed. 8°. *London*, 1843.

Daniel's artificial stone and sewer pipe company. 8°. *Detroit*, 1873.

Danson, J. Towne, and **Dempsey,** G. Drysdale. The inventor's manual; a familiar and practical treatise of the law of patents for inventions. 8°. *London*, 1843. pp. 94.

DANTZIC. Naturforschende Gesellschaft in Danzig. Neueste Schriften. B. 4, 5; B. 6, H. 1–4, 1843–62. Also, Neue Folge 1er Bd., 1868. 4°. *Dansig*, 1843–62. [2 copies.]

Digitized by Google

DANTZIC. Naturforschende Gesellschaft in Dansig. Schriften. 6 Hefte. roy. 8°. *Dansig*, 1866–73.

D'Anvers, N. Elementary history of art; an introduction to ancient and modern architecture, sculpture, painting and music. Preface by T. Roger Smith. 8°. *New York*, 1875.

Darby, John. Botany of the southern states, in two parts, viz. 1. Structural and physiological botany and vegetable products. 2. Description of southern plants arranged on the natural system. 8°. *New York*, 1855.

D'Arcet, Jean Pierre Joseph. *See* Arcet, d'.

Dargan, William, Memoir of. *See* Sproule, J. Resources of Ireland.

Darley, Felix O. C. Compositions in outline from Judd's Margaret. Engraved by Konrad Huber. fol. *New York*, 1856.

Darlington, William. Agricultural botany, an enumeration and description of useful plants and weeds, which merit the notice, or require the attention of American agriculturists. 12°. *Philadelphia*, 1847.

—— Flora Cestrica, an herborizing companion for the young botanists of Chester county, state of Pennsylvania. 3d ed. 12° *Philadelphia*, 1853.

—— Memorials of John Bartram and Humphrey Marshall, with notices of their botanical contemporaries. 8°. *Philadelphia*, 1849.

Darlington iron company (The). Manufacturers of rails, fishing-plates, switches, crossings, turn-tables, water-columns and other descriptions of railway plant. Thompson and Browning, agts. 4°. *London*, 1868.

DARLINGTONIA Californica, by J. Torrey. Smiths'n contrib., v. 6.

Darmanson, J. M. La beste dégradée en machine. 12°. *Amsterdam*, 1691. pp. 93.

DARMSTADT. Verein für Erdkunde und verwandte Wissenschaften. Notizblatt. Hrsg. von L. Ewald. Jahrg. 1–2; Heft 1–15, 1858–76. 8°. *Darmstadt*, 1858–76——.

Darwin, Charles. The descent of man, and selection in relation to sex. 2 v. 12°. *New York*, 1871.

—— The expression of the emotions in man and animals. 12°. *New York*, 1873.

Darwin, Charles. Geology by. *See* Herschel, *Sir* J. F. W. Manual of scientific inquiry.

—— Insectivorous plants. 8°. *New York*, 1875.

—— Journal of researches into the natural history and geology of the countries visited during the voyage of her majesty's ship Beagle, round the world. 2 v. 8°. *New York*, 1859.

—— On the origin of species by means of natural selection, or the preservation of favored races in the struggle for life. 12°. *New York*, 1860.

—— The variation of animals and plants under domestication. 2 v. 8°. *London*, 1868.

Darwin, Erasmus. The botanic garden;—a poem in two parts. 1. The economy of vegetation; 2. The loves of the plants—with philosophical notes. 3d ed. 4°. *London*, 1795.

—— Phytologia; or the philosophy of agriculture and gardening: with theory of draining morasses, and improved construction of the drill plough. 4°. *London*, 1800.

—— The temple of nature, or the origin of society. A poem with philosophical notes. 4°. *London*, 1803.

—— Zoonomia, or, the laws of organic life. 3d ed. 4 v. 4°. *London*, 1851.

DARWINISM. Species not transmutable: an examination of Darwin's "Origin of species." *See* Bree, C. R.

DATES, Dictionary of. *See* Haydn, J.

—— The manual of. *See* Townsend, George A.

Daubenton, M. Advice to shepherds and owners of flocks, on the care and management of sheep. Transl. from the French. 8°. *Boston*, 1810.

Daubeny, Charles. A description of active and extinct volcanos, with reference to their origin, their chemical phænomena and character of their products. 8°. *London*, 1826.

—— An introduction to the atomic theory, comprising a sketch of the opinions entertained by the most distinguished ancient and modern philosophers with respect to the constitution of matter. 8°. *Oxford*, 1831.

—— Supplement to the introduction to the atomic theory: comprising a sketch of certain opinions and discoveries bear-

Digitized by Google

Daubeny, Charles—Continued.
ing upon the general principles of chemical philosophy. 8°. *London*, 1840. pp. 63. [Bound with the introduction.]

D'Aubuisson de Voisins, J. F. *See* **Aubuisson de Voisins d'.**

Daulnoy, F. Le système métrique appliqué aux anciennes mesures du département de la Moselle; précédé des notions élémentaires sur le calcul décimal; du tableau des communes, avec indication du canton de justice de paix où chacune ressortit; enfin l'état général des anciennes mesures usitées dans toutes les communes. 12°. *Metz*, 1807.

Dausse, M. Études relatives aux inondations et à l'endiguement des rivières. 4°. *Paris*, 1872.

Davanne. Chimie photographique. *See* **Barreswil, C. S.**

Davenport, John. Dictionary of the Italian and English languages; additions by. *See* **Barretti, J.**

David, Hilaire. Méthode de peinture appliquée uniquement à la photographie de portraits. 8°. *Paris*, 1854. pp. 16.

Davidge, J. B. F., and **Kimball,** J. G. A compendium of internal revenue laws; with decisions, rulings, instructions, regulations, and forms. 8°. *Washington*, 1871.

Davidson, R. O. A new theory of the flight of birds. 8°. *Washington*, 1858. pp. 28.

Davie, D. D. T. The photographer's pocket companion; a practical treatise on the collodion process, both negative and positive; also the new German process, to which is added an appendix containing a description of the pantograph method of coloring collodion positives, etc. 18°. *New York*, 1857.

Davies, Charles. Arithmetic designed for academies and schools. 12°. *New York*, 1850.

—— Elementary algebra, embracing the first principles of the science. 12°. *New York*, 1852.

—— Elements of algebra, on the basis of M. Bourdon, embracing Sturm's and Horner's theorems, and practical examples. 8°. *New York*, 1853.

—— Elements of descriptive geometry, with their application to spherical trigonometry, spherical projections, and warped surfaces. 8°. *New York*, 1866.

Davies, Charles. Elements of drawing and mensuration applied to the mechanic arts. 12°. *New York*, 1846.

—— Elements of geometry and trigonometry, from the works of A. M. Legendre. 8°. *New York*, 1858.

—— Elements of geometry and trigonometry, with applications in mensuration. 12°. *New York*, 1851.

—— Elements of surveying and navigation, with descriptions of the instruments and the necessary tables. 8°. *New York*, 1860. Tables, pp. 71 and 100.

—— First lessons in arithmetic, combining the oral method with the method of teaching the combination of figures by sight. 18°. *New York*, 1849.

—— Grammar of arithmetic; or, analysis of the language of figures and science of numbers. 12°. *New York*, 1850.

—— The logic and utility of mathematics, with the best methods of instruction explained and illustrated. 8°. *New York*, 1850.

—— Outlines of mathematical science for the school room. 8°. *New York*, 1867.

—— School arithmetic, analytical and practical. 12°. *New York*, 1868.

—— A treatise on shades, shadows, and linear perspective. roy. 8°. *New York*, 1868.

—— University algebra; embracing a logical development of the science, with numerous graded examples. 8°. *New York*, 1858.

—— University arithmetic, Key to; embracing answers and a full analysis and solution of the difficult questions. 12°. *New York*, 1856.

—— and **Peck,** William G. Mathematical dictionary and cyclopedia of mathematical science. 8°. *New York*, 1856.

Davies, John. A collection of the most important cases respecting patents of inventions, and the rights of patentees, which have been determined in the courts of law since the statute for restraining monopolies. 8°. *London*, 1816.

Davies, Thomas A. Cosmogony; or, the mysteries of creation; to which is added a poem, illustrative of the subject. 8°. *New York*, 1857.

Davis, Charles Henry. Law of deposit of the flood tide. **Smiths'n contrib., v. 3.**

Digitized by Google

Davis, Charles Henry. Report on inter-oceanic canals and railroads. *See* UNITED STATES. **Navy** department.

Davis, Daniel. The book of the telegraph. 12°. *Boston*, 1851. pp. 46.

Davis, Daniel, *jr.* Descriptive catalogue of apparatus and experiments, to illustrate galvanism, electro-dynamics, magnetism, electro-magnetism, magneto-electricity, thermo-electricity. 24°. *Boston*, 1838. pp. 72.

——— List of new and improved magnetical instruments made since the publication of the catalogue in 1838. 4°. *Boston*, 1868. [Manuscript copy.]

——— A manual of magnetism, including galvanism, magnetism, electro-magnetism, electro-dynamics, magneto-electricity, and thermo-electricity. 2d ed. *Illus.* 12°. *Boston*, 1848.

Davis, Edwin Hamilton, and **Squier,** Ephraim George. Ancient monuments of the Mississippi valley. **Smiths'n contrib., v. 1.**

Davis, Henry G. Conservative surgery, as exhibited in remedying some of the mechanical causes that operate injuriously both in health and disease. 8°. *New York*, 1867.

Davis, J. E. Arctic discoveries. **Science lectures for the people, series 7.**

Davis, James J. A guide to health, designed for families and others. 12°. *New York*, 1868.

Davis, John. The measure of the circle, perfected in January, 1845. roy. 8°. *Providence*, 1854.

Davis, John Francis. The Chinese: a general description of the empire of China and its inhabitants. *Illus.* 2 v. 18°. *New York.* v. 1, 1848; v. 2, 1845.

Davis, N. S. History of the American medical association, from its organization up to January, 1855, ed. by S. W. Butler. roy. 8°. *Philadelphia*, 1855.

Davison, Darius. Progress of naval architecture: a popular and brief explanation of the principles and advantages of Darius Davison's new American model for ocean steamers, clipper ships, steamboats, yachts, etc. *Illus.* 8°. *New York*, 1852. pp. 46.

Davison, Simpson. The discovery and geognosy of gold deposits in Australia; with comparisons and accounts of the gold regions in California, Russia, India, Brazil, etc.; including a philosophical disquisition on the origin of gold in placer-deposits and in quartz-veins. *Illus.* 8°. *London*, 1860.

Davy, *Sir* Humphrey, The collected works of; with memoirs of his life, by his brother, Jno. Davy, M. D. 8°. *London*, 1839–40.

Davy, John. Memoirs of the life of Sir Humphrey Davy. *See* **Davy,** *Sir* Humphrey.

Dawkins, W. Boyd. Coal. **Science lectures for the people, series 2.**

Dawson, George. Dictionary of photography. *See* **Sutton,** Thomas.

Dawson, George Francis. American journal of mining; ed. by. *See* **American.**

Day, George E. Physiological chemistry; transl. by. *See* **Lehmann,** K. G. **Cavendish society publications.**

Day, Henry. Art recreations. *See* **Urbino,** L. B.

Day, Horace H. Day et al. vs. Stillman et al. Opinion of Judge Giles, and decision on final hearing. *See* **Giles,** W. F.

——— Goodyear vs. Day. Bill in equity. *See* **Goodyear,** Charles.

Day, Jeremiah. A practical application of the principles of geometry to the mensuration of superficies and solids. 8°. *New Haven*, 1839.

Day, John Q. Outlines of physical geography. 12°. *Boston*, 1846.

DEAD SEA, Expedition to the. *See* **Lynch,** W. F.

Dead shot (The), or, sportsman's complete guide; a treatise on the use of the gun by "Marksman." 12°. *New York*, 1867.

DEAF and dumb, Course of instruction for the. *See* **Peet,** Harvey Prindle.

DEAF-mutes, Instruction of. Colegio de sordo-mudos y de ciegos de Madrid. *See* SPAIN. **Instruccion** pública.

Dean, Amos. Principles of medical jurisprudence; designed for the professions of law and medicine. 8°. *Albany*, 1850.

Dean, H. The whole art of legerdemain, or hocus-pocus, in perfection, by which the meanest capacity may perform the whole art without a teacher. 6th ed. 24°. *Glasgow*, 1765.

Digitized by Google

Deane. Manual of the history and science of fire-arms. 8°. *London*, 1858.

Dearborn, Nathaniel. Guide through Mount Auburn. 12°. *Boston*, 1852.

DEATH from old age. *See* **Bostwick,** Homer.

De Babo, *Le Baron* L. *See* **Babo,** L. de.

DEBATES and proceedings in the congress of the U. S. 1789–1824. *See* UNITED STATES. **Congress.**

Debette. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

De Bow, James D. B. Census of the United States, 1850. *See* UNITED STATES. **Interior** department.

——— The commercial review of the south and west; devoted to commerce, agriculture, manufactures, internal improvements, etc. v. 1–29. 1847–60. After the war series, v. 1–7, 1866–69. 8°. *New Orleans and Washington*, 1847–60. *Nashville*, 1866–69. [From v. 9 it is entitled "De Bow's review of the southern and western states;" from v. 14, "De Bow's review and industrial resources, statistics," etc. After the war series, is entitled "De Bow's review; devoted to the restoration of the southern states and the development of the wealth and resources of the country."]

——— Statistical view of the United States, embracing its territory, population,—white, free colored and slave—moral and social condition, industry, property, revenue, etc. 8°. *Washington*, 1854.

De Bryas, *Le M. Chevalier*. *See* **Bryas,** de.

DECIMAL system (The) in numbers, coins and accounts. *See* **Bowring,** *Sir* John.

——— system of weights and measures. *See* **Felton,** John H.

——— ——— Weights and measures according to the. *See* **Craig,** B. F.

DECISIONS of the commissioner of patents. *See* UNITED STATES. **Interior** department. **Patent** office.

De Coin, Robert L. History and cultivation of cotton and tobacco. 12°. *London*, 1864.

DECORATION. Art de l'ornemaniste, etc. *See* **Art.**

——— Byzantinische Dekorationen. *See* **Cramer,** C.

——— Muster-Sammlung für Dekorationsmaler. *See* **Anschütz,** H.

DECORATION. Ornaments and interior decorations. *See* **Chippendale.**

——— Rapport sur les matériaux de. *See* **Gourlier.**

——— Suggestions for house decoration. *See* **Garrett,** Rhoda and Agnes.

——— Tapezirarbeiten und Dekoration von Anton Fix. VIENNA. **General-Direction der Weltausstellung 1873. Gruppe 5.**

——— Die Technik des Kolorirens und Dekorirens. *See* **Strele,** Karl. **146 Neuer Schauplatz der Künste.**

De Cordova, J. Texas: her resources and her public men. A companion for De Cordova's new and correct map of the state of Texas. 12°. *Philadelphia*, 1858.

De Cuyper, Ch. *See* **Cuyper,** de.

DEEP SEA, The temperature and life of the. *See* **Science lectures for the people, series 2.**

DEFENCE of the United States' patent system, by Henry Howson. *See* **United** States patent association.

Defontaine. Mémoire sur le projet d'un chemin de fer de Paris à Orléans. *See* FRANCE.

——— Mémoire sur le projet d'un chemin de fer de Paris à Rouen, au Havre et à Dieppe. *See* FRANCE.

DEFORMITIES, On the mechanical appliances necessary for the treatment of. *See* **Bigg,** Henry Heather.

De Fortia, D'Urban. *See* **Fortia,** de.

De Gasparin. *See* **Gasparin,** de.

Degen, Ludwig. Der Bau der Krankenhäuser mit besonderer Berücksichtigung der Ventilation und Heizung. 8°. *Illus. München*, 1862.

——— Practisches Handbuch für Einrichtungen der Ventilation und Heizung von öffentlichen und Privatgebäuden. Nach dem System der Aspiration von **Morin's** Manuel. 8°. *München*, 1869.

Deghuée, Jos. Aufgaben und Anleitung zum schriftlichen Rechnen. Für deutsche Schulen in den Vereinigten **Staaten.** 1. Th. 8°. *New York*, 1866.

Déglin. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

Degousée, Jules, and **Laurent,** Ch. Guide du sondeur ou traité théorique et pratique des sondages. *Illus.* 2s 6d. T. 1–2. Atlas. 8°. *Paris*, 1861.

De Grey, Thomas, *esquire*. **The compleat horseman and ferrier, in two books.** 1

Digitized by Google

De Grey, Thomas, *esquire*—Continued. Shewing the best manner of breeding good horses; with their choice, nature, riding, and dieting, as well for running as hunting. 2. Directing the most exact and approved manner how to know and cure all maladies and diseases in horses. sm. 4°. *London*, 1684.

De Hart, William C. Observations on military law and the constitution and practice of courts martial: with a summary of the law of evidence, as applicable to military trials, etc. 8°. *New York*, 1846.

De Hauer, Fr. *See* **Hauer,** de.

DEIPNOSOPHISTS, The. *See* **Athenæus.**

Dejean, Jean François Aimé, *comte.* Expériences faites pour constater la bonté du procédé du comte Dejean pour la conservation des grains. *See* **Sainte Fare Bontemps.**

De Kieffer, Eugene. Practical instructions in horsemanship. 12°. *Philadelphia*, 1868.

De Koninck, L. L., and **Dietz,** E. A practical manual of chemical analysis and assaying; as applied to the manufacture of iron from its ores, and to cast iron, wrought iron and steel, as found in commerce. Ed. with notes, by Robert Mallet. 12°. *London*, 1872.

Delabarre, C. F. A treatise on second dentition and the natural method of directing it, etc. Transl. from the French. 8°. *Baltimore*, 1845. **American library of dental science, v. 7.**

Delabarre-Duparcq, Nicolas Édouard. Elements of military art and history: comprising the history and tactics of the separate arms; the combination of the arms; and the minor operations of war. Transl. and ed. by Brig. Gen. George W. Cullum. 8°. *New York*, 1863.

De la Beche, *Sir* Henry Thomas. Mineralogy. *See* **Herschel,** *Sir* J. F. W. **Manual** of scientific inquiry.

—— Mining, quarrying, and metallurgical processes and products. *See* **Lectures** on the results of the exhibition.

—— and **Reeks,** Trenham. Catalogue of specimens illustrative of the composition and manufacture of British pottery and porcelain, from the occupation of Britain by the Romans to the present time. 8°. *London*, 1855.

Delafield, Richard. Report on the art of war in Europe in 1854–'5–'6. 4°. *Washington*, 1860.

De la Fueille, Daniel. *See* **La Fueille,** de.

De la Hire. *See* **La Hire,** de.

Delambre. Histoire de l'astronomie ancienne. 2 v. 4°. *Paris*, 1817.

Delamere, Edmund S. and Ellen J. Wholesome fare, or, the doctor and the cook. A manual of the laws of food and the practice of cookery, embodying the best receipts in British and continental cookery. 12°. *London*, 1868.

Delamotte, F. The book of ornamental alphabets, ancient and mediæval. From th 8th century, with numerals. 6th ed. 4°. *London*, 1865.

——The embroiderer's book of design: containing, initials, emblems, cyphers, monograms, ornamental borders, etc. 4°. *London*, 1860.

Delamotte, Philip H. The oxymel process in photography. 8°. *London*, 1856. pp. 32.

—— The practice of photography. 2d rev. ed. 8°. *London*, 1855.

De la Rue, W. Annual report of the progress of chemistry. *See* **Liebig,** J. V., and **Kopp,** H.

Delaunaux, Victor, and **Elliott,** John. Street architecture: a series of shop fronts and façades, characteristic of, and adapted to different branches of commerce. 4°. *London*, 1855.

De Lasteyrie, C. P. *See* **Lasteyrie,** de.

Delatot-Sevin. Systèmes pour l'éclairage et le chauffage par l'électricité à l'aide du photogène et du thermogène. 8°. *Paris*, 1861. pp. 39.

Delatour, A. J. A daily record of the thermometer for ten years; from 1840 to 1850. 24°. *New York*, 1850.

Delestre, J. B. Annuaire de la photographie: résumé des procédés les meilleurs pour la plaque métallique; le papier sec et humide; la glace albuminée ou collodionnée; la gravure héliographique; la litho-photographie; le cliché typographique; la stéréoscopie; l'hélio-plastique; l'amplification des images; la damasquinure; photographie sur tissus; collodion sur toile cirée; avec l'indication des instruments nouveaux, et la nomenclature de ces matières. Continué par C. Lefebvre. 2 v. 8°. *Paris*, 1858, 1862.

Digitized by Google

Delisser, R. L. Interest and average tables at seven per cent. 4°. *New York,* 1854.

Delmar, Alexander. Statistical tables, from the treasury department, 1867, 1869, viz.: 1. Statement of foreign imports. 2. Statement of domestic exports. 3. Statement of duties received. 4. Commercial reports from U. S. consuls, etc. fol. *Washington,* 1867, 1869.

——— Statistics of the United States, compiled under the authority of the secretary of the treasury. 8°. *Washington,* 1867.

Delobel, L. La déviation des projectiles dans l'air; trad. par. *See* **Magnus,** G.

Delondre, Auguste. De la bière; trad. par. *See* **Mulder,** G. J.

Deluc, M. J. A. Account of a new hygrometer. sm. 4°. *London,* 1774.

Delvigne, Henri Gustave. Notice historique sur l'expérimentation et l'adoption des armes rayées à projectiles allongés 8°. *Paris,* 1860. pp. 82.

Demachy, Jacques François. Art du distillateur des eaux fortes, etc. PARIS. **Acad. des sc., arts et métiers, v. 37 and 12.**

Demarteau, Amédée. Galvanized iron and its application to building and other purposes: a description of J. and G. Winiwarter's manufactory in Gumpoldskirchen, Austria, etc. 4°. *Vienna and London,* 1862.

De Massoul, Constant. *See* **Massoul,** de.

De Massy, J. Robert. *See* **Massy,** de.

Demme, Andr. Valent. Der praktische Maschinenbauer: ein Handbuch der Maschinenbauer, Mechaniker, Kunstdrechsler und Fabrikbesitzer. 28 B., and 11 B. plates. 12°. *Quedlinburg und Leipzig,* 1834–50.

DEMOCRACY, The measures of the. *See* **Republic** of the United States.

Demoor, V. P. G. Traité de la culture du lin et des différents modes de rouissage. 18°. *Bruxelles,* 1855.

Demorest, W. Jennings. Demorest's illustrated monthly, and Mme. Demorest's mirror of fashions. 5 v., 7–11. 4°. *New York,* 1870–74.

De Morgan, Augustus. Arithmetical books from the invention of printing to the present time. 8°. *London,* 1847.

De Morgan, Augustus. The book of almanacs: with an index of reference, by which the almanac may be found for every year, whether in old or new style, from any epoch, ancient or modern up to A. D. 2000, etc. sm. 4°. *London,* 1851.

——— The differential and integral calculus, etc. 8°. *London,* 1842.

——— The elements of algebra. Transl. from the three first chapters of the algebra of M. Bourdon. 8°. *London,* 1828.

——— An essay on probabilities, and on their application to life contingencies and insurance offices. 16°. *London.* **Lardner's cabinet cyclopædia, v. 110.**

——— The globes,—celestial and terrestrial 2d ed. 8°. *London,* 1847.

De Mortillet, Paul. *See* **Mortillet,** de.

Demours, Pierre. Table des matières contenues dans l'histoire et les mémoires de l'académie. *See* PARIS. **Académie des sciences**

Dempp, Carl Wilhelm. Muster-Sammlung für Hafner, Ofenbauer, etc. Heft 1–3. 8°. *München,* 1844–45.

——— Muster-Sammlung für Maurer. Heft 1.–6. 4°. *München,* 1844–46.

——— Muster-Sammlung für Steinmetzen, Bildhauer und Stuckatoren. Heft 1–4. Tafeln 48. 4°. *München,* 1844.

——— Muster-Sammlung für Zimmerleute. Heft 1–4. 4°. *München,* 1844–45.

Dempsey, G. Drysdale. Atlas of the engravings to illustrate and pictorially explain the locomotive engine in all its phases. 4°. *London,* 1859.

——— Inventor's manual. *See* **Danson,** J. T.

——— Malleable iron bridges: details of their construction, and summary of experiments, etc. *Illus.* 4°. *London,* 1850. pp. 24.

——— The practical railway engineer. Examples of the mechanical and engineering operations and structures combined in the making of a railway. 4°. *London,* 1847.

——— Rudimentary treatise on drainage of districts and lands. 12°. *London,* 1849. **Weale's series, No. 29.**

——— Rudimentary treatise on the drainage of towns and buildings. 12°. *London,* 1849. **Weale's series, No. 30.**

——— Rudimentary treatise: tubular and other iron girder bridges, particularly

Digitized by Google

Dempsey, G. Drysdale—Continued. describing the Britannia and Conway tubular bridges, etc. *Illus.* 12°. *London*, 1850. **Weale's series, No. 43.**

D'Endegeest, Gevers. *See* **Endegeest,** d'.

De Negri, Antonio. Pneumodensimetro automaico. roy. 8°. *Genova*, 1870. pp. 24.

Denis, Ferdinaud. Manuel du peintre et du sculpteur. *See* **Arsenne,** L. C. **21 Manuels Roret.**

Denison, Edmund Beckett. A rudimentary treatise on clock and watch making: with a chapter on church clocks, and an account of the great Westminster clock. *Illus.* 12°. *London*, 1850. **Weale's series, 67, 68.**

DENMARK, at the universal exposition of 1867, at Paris. *See* **Schmidt,** Valdemar.

——— History of. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 57–59.**

Dent, Edward J. A treatise on the aneroid, a newly invented portable barometer; with a short historical notice on barometers in general, their construction and use. 8°. *London*, 1849. pp. 34.

DENTAL anæsthesia. *See* **Quinton,** J. Richard.

——— cosmos (The), a monthly record of dental science: devoted to the interests of the profession. Ed. by J. D. White, J. H. McQuillen and George J. Ziegler. v. 1–18, 1859–76. 8°. *Philadelphia*, 1860–76——.

——— materials, Catalogue of. *See* White, Samuel S.

——— medicine. *See* **Bond,** Thomas E. **American library of dental science, v. 11.**

——— news letter (The). Ed. by J. D. White and J. R. M'Curdy. v. 9. January, 1856, No. 2. 8°. *Philadelphia*, 1856. pp. 65–144.

——— surgery. *See* **Harris,** Chapin A.

——— surgery, Chemistry and metallurgy applied to. *See* **Piggott,** A. Snowden.

——— surgery, A new treatise on the theory and practice of. *See* **Lefoulon,** J. **American library of dental science, v. 5.**

——— surgery, Principles of, etc. *See* **Koecker,** Leonard. **American library of dental science, v. 3.**

——— surgery, Principles and practice of. *See* **Harris,** C. A.

DENTAL system, Anatomy of the. *See* **Blandid,** Ph. Fr. **American library of dental science, v. 7.**

DENTISTRY. *See* **American** journal of dental science.

——— *See* **American library of dental science.**

——— **Abridgments English patents, No. 25.**

——— Complete elements of the science and art of the dentis. *See* **Desirabode,** M. **American library of dental science, v. 8.**

——— Dictionary of dental science, biography, bibliography and medical terminology. *See* **Harris,** C. A.

——— Operative. *See* **Taft,** J.

——— The practical family dentist. *See* **Warner,** Dewitt C.

——— Surgical, operative, and mechanical dentistry. *See* **Loude,** L. Charles de.

——— Treatise on mechanical. *See* **Richardson,** Joseph.

DENTITION, First. *See* **Baumes,** M. **American library of dental science, v. 2.**

——— Second, A treatise on, etc. *See* **Delabarre,** C. F. **American library of dental science, v. 7.**

DENTOLOGIA. A poem on the diseases of the teeth, and their proper remedies. *See* **Brown,** Solyman. **American library of dental science, v. 2.**

DEODORIZING. Fosses d'aisance—ventilation, désinfection, etc. *See* **Liger,** F.

Déon, Horsin. Von der Erhaltung und Restauration der Gemälde. Uebersetzt und mit vielen Zusätzen versehen von A. W. Hartel. 8°. *Weimar*, 1853. **203 Neuer Schauplatz der Künste.**

De Pambour, *Comte. See* **Pambour,** *Comte* de.

De Parville, Henri *See* **Parville,** de.

De Passa, Jaubert. *See* **Passa,** de.

De Perthes, Boucher. *See* **Perthes,** de.

Depierre, M. J. Mémoire sur les machines à laver. *Illus.* 8°. *Rouen*, 1876. **Société** libre d'émulation, du commerce et de l'industrie de la Seine-inférieure.

De Ponsort, *Le Baron. See* **Ponsort,** de.

DEPOSITS of the flood tide, Law of. By C H. Davis. **Smiths'n contrib., v. 3.**

Digitized by Google

De Reaumur. The art of hatching and bringing up domestic fowls of all kinds at any time of the year. 8°. *London*. 1750.

De Renzy, George Webb. Enchiridion; or, a hand for the one-handed. 8°. *London*, 1822.

Derham, W. Astro-theology; or, a demonstration of the being and attributes of God, from a survey of the heavens. 2d ed. 12°. *London*, 1715.

De Romé De l'Isle. *See* **Romé de Lisle,** de.

Derrick and drill; or, an insight into the discovery, development, present condition, and future prospects of petroleum, in New York, Pennsylvania, Ohio, West Virginia, etc.; by the author of "Ten acres enough." 12°. *New York*, 1865.

Desaguliers, J. T. A course of experimental philosophy. 4°. *London*, 1734–44.

Desberger, F. Eduard. Kunst und Gewerbe-Blatt; red. v. *See* MUNICH.

Descartes, Renatus. Le monde de M. Descartes, ou le traité de la lumière et des autres principaux objets des sens; avec un discours de l'action des corps, et un autre des fièvres, composez selon les principes du même auteur. 18°. *Paris*, 1664.

——— Renati Descartes principia philosophiæ. Ultima editio cum optima collata, diligenter recognita, et mendis expurgata. sm. 4°. *Amstelodami*, 1692.

DESCENT of man, and selection in relation to sex. *See* **Darwin,** Charles.

Deschanel, A. Privat. Elementary treatise on natural philosophy. Transl. by J. D. Everett. Part 1. Mechanics, hydrostatics and pneumatics. Part 2. Heat. Part 3. Electricity and magnetism. Part 4. Sound and light. 4 v. 8°. *New York*, 1873. [Another copy complete in 1 v.]

Des Charmes, Pajot. The art of bleaching piece goods, cottons and threads of every description. Transl. from the French, with appendix. 8°. *London*, 1799.

Description and use of his majesty's dials in Whitehall Garden. 8°. *London*, 1624.

——— nature and general use of the sector and plain scale. Also, a short account of the uses of the lines of numbers, artificial lines and tangents. 8°. *London*, 1721. pp. 44.

Description of a double horizontal dyal, for the latitude of London, of the diameter of 14½ inches; together with an explanation or exposition of its various uses. 8°. pp. 16. *n. t. p.*

——— (A) of the great burning-glass made by Mr. Villette and his two sons:—with some remarks upon the surprising and wonderful effects thereof. 16°. *London*, 1719. pp. 15.

DESIGN and manufactures, The journal of. *See* **Journal** of design.

——— Copyright in. *See* **Turner,** T.

——— Cours de dessin linéaire. *See* **Cours** de dessin.

——— Manual of. *See* **Redgrave,** Gilbert R. **South Kensington museum, Art and science handbooks, No. 6.**

——— National academy of. *See* **Cummings,** Thomas S.

——— patents, Law of. *See* **Sir-onds,** William Edgar.

DESIGNING. Manuel du dessinateur. *See* **Brégeant,** R. L. **116 Manuels Roret.**

DESIGNS. Architecture de portes et cheminées. *See* **Lepautre,** J.

——— Copyright of designs for printed fabrics. *See* **Tennent,** J. E.

——— Cottages, villas, etc. *See* **Lafever,** Minard. **Architectural** instructor.

——— Dessins des objets en fonte de fer. *See* **Durenne,** A.

——— Details of timber houses, furniture, gold, silver, brass and iron work. *See* **Pugin,** A. W.

——— Entwürfe zu Stubenöfen. *See* **Pötzsch,** E.

——— Examples of ornamental metal work. *See* **Shaw,** H.

——— for architecture. *See* **Jones,** William.

——— for glasses. *Illus.* 36 pl. *n. t.* [*London*].

——— Furniture and decoration. *See* **Wood,** H.

——— Guide to workers in metal and stone. *See* **Walter,** T. U., and **Smith,** J. J.

——— House furnishing, decorating and embellishing assistant. *See* **Whitaker,** H.

——— Illustrated catalogue of bedsteads. *See* **Heal,** J. H.

——— Law and practice of registration of. *See* **Byrne,** J. P.

——— Manufactures d'articles en tôle et fonte émaillées. *See* **Rogeat.**

Digitized by Google

DESIGNS. Muster-Sammlung für Schloeser. *See* **Krug**, E.

——— Muster-Sammlung für Steinmetzen u. s. w. *See* **Dempp**, C. W.

——— Musterkarte von Gussgegenständen. *See* **Musterkarte.**

——— A new book of, in iron work. *See* **Jores**, J.

——— Originalzeichnungen zu Stubenöfen u. s. w. in Thon. *See* **Wagner**, F.

——— Ornamental designs applicable to furniture, etc. *See* **Looke**, M.

——— Property in. *See* **Webster**, T.

——— Registration of. *See* **Billing**, S., and **Prince**, A.

——— Registration of. *See* **Webster**, T.

——— Report on copyright of. *See* GREAT BRITAIN.

——— Treatise on the law of. *See* **Godson**, R.

Desirabode. Complete elements of the science and the art of the dentist; followed by an historical and chronological notice of the works published on the dental art, from the time of Hippocrates. 2d ed. Transl. from the French by *—A—*. 8°. *Baltimore*, 1847. **American library of dental science, v. 8.**

Deslandes. Recueil de différens traitez de physique et d'histoires naturelles, propres à perfectionner ces deux sciences, avec figures. 18°. *Paris*, 1736.

DESMIDIACEÆ and diatomaceæ. A history of infusoria. *See* **Pritchard**, Andrew.

Desormeaux, A. O. Paulin. Les amusemens de la campagne. T. 1–4. *Illus.* 12°. *Paris*, 1826. [Supplement to T. 4, pp. 31.]

——— Dictionnaire des arts, etc. *See* **Laboulaye**, C. P. L.

——— Dictionnaire de l'industrie. *See* **Baudrimont**, A. E., and others.

——— Manuel complet du treillageur, et du menuisier des jardins. *Illus.* 8°. *Paris*, 1836. **75 Manuels Roret.**

——— Manuel de l'armurier, du fourbisseur, et de l'arquebusier. 18°. *Paris*, 1832. New ed. *Illus.* Pts. 1, 2. 24°. *Paris*, 1852. **106 Manuels Roret.**

——— Nouveau manuel complet de l'armurier, du fourbisseur et de l'arquebusier, ou traité complet et simplifié de ces arts. New ed. *Illus.* Pts. 1, 2. Text 24°. Pl. obl. 24°. *Paris*, 1852. **106* Manuels Roret.**

Desormeaux, A. O. Paulin. Nouveau manuel complet du fabricant d'objets en caoutchouc, en gutta-percha et en gomme factice, etc. 18°. *Paris*, 1855. **114 Manuels Roret.**

——— La pêche à la ligne, extraite des Amusemens de la campagne. *Illus.* 12°. *Paris*, 1826.

——— Principes de l'art du tour, extraits de l'ouvrage de. 12°. *Paris*, 1825.

Despretz. Dictionnaire de l'industrie. *See* **Baudrimont**, A. E., and others.

Desprey, Auguste. Echo du monde savant; 6e année publ. par. *See* **Echo.**

Dessables. Manuel du tourneur. 2e éd. très-augmentée. *Illus.* T. 1–2. 18°. *Paris*, 1831. **49 Manuels Roret.**

DESSAU. Verhandlungen des naturhistorischen Vereins für Anhalt in Dessau. 5 B. 8°. *Dessau*, 1861–65.

Des Vergens, Marie Joseph Adolphe Noël. Complément de l'encyclopédie moderne *See* **Courtin**, E. M. P. M. A. **Encyclopédie moderne.**

De Tegoborski, M. L. Commentaries on the productive forces of Russia. 2 v. 8°. *London*, 1855.

Deuchs, Johann Carl. Das Verdunsten oder Verdampfen und die Mittel es zu erleichtern, etc. Mit Abbildungen. 8°. *Nürnberg*, 1834. pp. 64. [Bound in a volume with others.]

Deutsche Ausstellungs-Zeitung, von C. Kesseler-Greifswald. fol. *Paris*, 1867.

——— Gewerbe-Zeitung, und Sächsisches Gewerbe-Blatt. 20 v. Verantwortliche Herausgeber, J. Geo. Günther—Friedrich G. Wieck. Bd. 10–29, Jahrg. 1845–64. *Leipzig und Chemnitz*, 1845–64.

Deutscher Zeitungs-Katalog für das Jahr 1853, oder fünfte vollständig umgearbeitete Auflage. Verzeichniss von 2270 in Deutschland und den angrenzenden Ländern in deutscher Sprache erscheinenden periodischen Schriften, mit Einschluss von politischen Zeitungen, Tage-, Wochen- und Intelligenzblättern. 8°. *Leipzig*, 1853.

De Vallemont, Pierre. *See* **Vallemont.**

De Veitelle, J. Mercantile dictionary: a complete vocabulary of technicalities of commercial correspondence, names of articles of trade, and marine terms, in

Digitized by Google

De Veitelle, J.—Continued.
English, Spanish and French. 16°. *New York*, 1864.

Devey, Joseph. The life of Joseph Locke, civil engineer. 8°. *London*, 1862.

——— Works of Lord Bacon. *See* **Bacon,** Francis.

DEVICES. La science des devises. *See* **Iconologie.**

Devillez, A. Ventilation des mines: études sur les lois qui président au mouvement et à la distribution de l'air dans les travaux d'exploitation, etc. 8°. *Mons*, 1875.

De Voe, Thomas F. The market assistant; containing a brief description of every article of human food sold in the markets of New York, Boston, Philadelphia and Brooklyn, including domestic and wild animals, game, etc. 12°. *New York*, 1867.

DEVON and Cornwall natural history society, Report and transactions of the. *See* PLYMOUTH.

De Weckherlin, Aug. *See* **Weckherlin.**

Dewees, William P. A compendious system of midwifery, chiefly designed to facilitate the inquiries of those who may be pursuing this branch of industry. Illustrated by occasional cases. 8°. *Philadelphia*, 1852.

——— A treatise on the diseases of females. 8°. *Philadelphia*, 1854.

——— A treatise on the physical and medical treatment of children. 8°. *Philadelphia*, 1853.

De Witt, Francis. Abstract of the census of the commonwealth of Massachusetts, 1855. 8°. *Boston*, 1857.

——— Report to the legislature of Massachusetts, relating to the registry and returns of births, marriages and deaths in the commonwealth, for the year 1855. 8°. *Boston*, 1857.

DEXTRINE. Handbuch der Stärkefabrikation, etc. *See* **Wagner,** Ladislaus von. **39 Neuer Schauplatz der Künste.**

Dialect of Craven, in the West riding of the county of York, with a copious glossary. Illustrated by authorities from ancient English and Scottish writers. By a native of Craven. 2d ed. 2 v. 8°. *London*, 1828.

——— of South Lancashire. *See* **Bamford,** Samuel.

DIALING. Horologiographia optica. *See* **Morgan,** Silvanus.

——— Mechanick dyalling. *See* **Moxon,** J.

——— Perspectiva horaria. *See* **Maignan,** Emmanuele.

——— Plain, concave, convex, etc. *See* **Leybourn,** William.

——— Populäre Gnomonik. *See* **Sternheim,** H. **78 Neuer Schauplatz der Künste.**

DIALOGUES on instinct. *See* **Brougham,** Henry, *Lord.*

DIALS. Description of a double horizontal dial for the latitude of London. *See* **Description.**

Diamond, Hugh W. Journal of the photographic society. *See* LONDON.

DIAMONDS and pearls, A treatise on. *See* **Jeffries,** David.

——— and precious stones, A treatise on. *See* **Mawe,** John.

DIARY of a physician. *See* **Tyson,** James L.

DIATOMS. Diatomeen der hohen Tatra. *See* **Schumann,** J.

Dick, William B. Encyclopedia of practical receipts and processes, containing over 6,400 receipts. 8°. *Philadelphia*, 1872.

Dickens, Charles, A lecture on. **Science lectures for the people, series 2.**

Dickerson, Edward N. The navy of the United States. An exposure of its condition, and the causes of its failure, contained in a speech delivered to a jury in the supreme court of the District of Columbia, etc. 8°. *New York*, 1864. pp. 80.

Dickeson, Montroville Wilson. The American numismatical manual of the currency, or money of the aborigines; and colonial and United States coins, etc. 4°. *Philadelphia*, 1859.

Dickson, James H. The fibre plants of India, Africa, and our colonies: a treatise on rheea, plantain, pine apple, jute, African and China grass, and New Zealand flax; and on the cultivation, preparation and cottonizing of home-grown and continental flax and hemp, fitted for spinning on the existing cotton machinery; and also on silk, worsted and flax spinning machinery, with instructions on the method of preparing, spinning and weaving by the machines and process of the author. 8°. *London and Dublin*, 1864.

Digitized by Google

Dickson, James H. A series of letters on the improved mode of the cultivation and management of flax: with various rules and instructions on the value and quality of flax, etc. 16°. *London*, 1846.

Dickson, John. The unity of the physical sciences; an inquiry into the causes of gravitation and polarity, with an application of the results to some of the principal phænomena in each of the physical sciences. 12°. *London*, 1859. pp. 87.

Dickson, Samuel. The principles of the chrono-thermal system of medicine, with the fallacies of the faculty. In a series of lectures. Also an introduction and notes, by Wm. Turner. 13th ed. 8°. *New York*, 1850.

Dickson, Samuel Henry. Elements of medicine; a view of pathology and therapeutics, or the history and treatment of diseases. 8°. *Philadelphia*, 1855.

——— Essays on life, sleep, pain, etc. 12°. *Philadelphia*, 1852.

——— Studies in pathology and therapeutics. 16°. *New York*, 1867.

Dickson, S. R. Iron piers for deep water; part 1, A synopsis of a new mode of constructing sub-aqueous works of iron and stone. 4°. *New Haven*, 1872.

Dictionarium polygraphicum; or, the whole body of arts, regularly digested. 2 v. 8°. *London*, 1735.

DICTIONARY. Abrégé du grand dictionnaire de technologie. *See* **Drapiez.**

——— Allgemeines chemish-technish-ökonomisches Recept-Lexikon. *See* **Percy,** A. R.

——— Allgemeines Wörterbuch der Marine. *See* **Röding,** Johann Heinrich.

——— Althochdeutscher Sprach-Schatz. *See* **Graff,** E. G.

——— American artist's manual, or, dictionary of practical knowledge. *See* **Cutbush,** James.

——— Analytical dictionary of the English language. *See* **Booth,** D.

——— Biographical. *See* **Rose,** Hugh James.

——— Biographisch-literarisches Handwörterbuch. *See* **Poggendorff,** J. C.

——— Botanical. *See* **Milne,** Colin.

——— Classical dictionary of the vulgar tongue. *See* **Grose,** Francis.

——— Deutsches Bergwörterbuch, mit Belegen. *See* **Veith,** Heinrich.

DICTIONARY. Dictionnaire de chimie. *See* **Cadet,** Chas. Louis.

——— Dictionnaire de chimie. *See* **Klaproth,** M. H., and **Wolff,** F.

——— Dictionnaire de chimie, pure et appliquée. *See* **Wurtz,** Ad.

——— Dictionnaire de l'industrie. *See* **Dictionnaire.**

——— Dictionnaire de l'industrie manufacturière, commerciale et agricole. *See* **Dictionnaire** de l'industrie.

——— Dictionnaire de la langue française. *See* **Littré,** É.

——— Dictionnaire des altérations et falsifications des substances alimentaires, médicamenteuses, etc. *See* **Chevallier,** M. A.

——— Dictionnaire des origines, découvertes, inventions et établissemens. *See* **Dictionnaire** de l'industrie.

——— Dictionnaire général des eaux minérales et d'hydrologie médicale. *See* **Durand-Fardel,** M., **Le Bret,** E., **Lefort,** J., and **François,** J.

——— Dictionnaire général des termes d'architecture. *See* **Ramée,** Daniel.

——— Dictionnaire géographique. *See* **Vandermaelen,** Ph.

——— Dictionnaire œconomique. *See* **Chomel,** Noël.

——— Dictionnaire technologique. *See* **Tolhausen** and **Gardissal.**

——— Dictionnaire universel des arts et métiers. *See* **Dictionnaire** universel.

——— Dictionnaire usuel de chimie, de physique, et d'histoire naturelle. *See* **Brard,** C. P.

——— English. *See* **Ash,** John.

——— ——— *See* **Dyche,** Thomas.

——— ——— *See* **Phillips,** Edward.

——— ——— *See* **Reid,** Alexander.

——— ——— *See* **Richardson,** Charles.

——— ——— *See* **Sheridan,** Thomas.

——— ——— *See* **Webster,** Noah.

——— ——— *See* **Webster,** N. [Academic edition.]

——— ——— *See* **Webster,** N. [Counting-house edition.]

——— ——— *See* **Worcester,** Joseph.

——— ——— Etymological. *See* **Bailey,** J. N.

——— ——— ——— *See* **Oswald,** John.

——— ——— ——— *See* **Wedgwood,** Hensleigh.

——— English-Irish. *See* **English-Irish** dictionary.

Digitized by Google

DICTIONARY, English-Irish. *See* **Foley**, Daniel.

—— English-Welsh. *See* **Walters**, John.

—— French and English. *See* **Collot**, A. G.

—— —— *See* **Miege**, Guy.

—— French and Flemish. *See* **Halma**, François.

—— General biographical. *See* **Blake**, J. L.

—— —— —— *See* **Cates**, William L. R.

—— German, English and French technological. *See* **Beil**, J. A.

—— Glossary of supposed Americanisms. *See* **Elwyn**, A. L.

—— Greek and Roman; biography and mythology. *See* **Smith**, William.

—— Handwörterbuch der reinen und angewandten Chemie. *See* **Liebig**, Justus, and **Poggendorff**, J. C.

—— Hard words used in the English language. *See* **Glossographia.**

—— Jenkins' vest-pocket lexicon of unfamiliar words. *See* **Jenkins**, Jabez.

—— Marine. *See* **Falconer**, W.

—— Mechanic's pocket. *See* **Grier**, William.

—— Mercantile; English, Spanish and French. *See* **De Veitelle**, J.

—— The miner's. *See* **Hooson**, William.

—— Nautical. *See* **Young**, Arthur.

—— Nouveau dictionnaire portatif de bibliographie, etc. *See* **Fournier**, Fr. Ign.

—— of apparatus and instruments employed in philosophical and experimental chemistry; by a practical chemist. 8°. *London*, 1824.

—— of archaic and provincial words. *See* **Halliwell**, James O.

—— of arts, manufactures and mines. *See* **Ure**, Andrew.

—— of authors. *See* **Allibone**, S. Austin.

—— of difficult terms. *See* **Coles**, H.

—— of dyeing and calico printing. *See* **O'Neill**, Charles.

—— of engineering. *See* **Spon's.**

—— of family and Christian names. *See* **Arthur**, W.

—— of gardening. *See* **Johnson**, George William.

—— of machines, mechanics, engine-work, and engineering. *See* **Appleton's** dictionary.

—— of mechanical science, etc. *See* **Jamieson**, A.

DICTIONARY of music. *See* **Rousseau**, Jean Jacques.

—— of musical terms. *See* **Adams**, John S.

—— of natural history terms. *See* **McNicoll**, D. H.

—— of noted names of fiction. *See* **Wheeler**, William A.

—— of painters and engravers. *See* **Ottley**, Henry.

—— of photography. *See* **Sutton**, Thomas.

—— of phrase and fable. *See* **Brewer**, E. Colham.

—— of popular medicine. *See* **Haydn's.**

—— of provincialisms, etc. *See* **Wright**, Thomas.

—— of quotations from the Greek, Latin, and modern languages. *See* **New** dictionary of quotations.

—— of quotations. Latin and Greek. *See* **Riley**, H. T.

—— of science, literature and art. *See* **Brande**, W. T., and **Cox**, G. W.

—— of the Anglo-Saxon language. *See* **Bosworth**, J.

—— of the Norman, or old French language. *See* **Kelham**, Robert.

—— of the Scottish language. *See* **Jamieson**, John.

—— of useful information. *See* **Beeton.**

—— English and Russian. *See* **New** pocket dictionary, English and Russian.

—— Russian, French, German and English. *See* **Reiff**, Charles Philippe.

—— The sailor's word-book. *See* **Smyth**, W. H.

—— Sanskrit and English. *See* **Benfey**, Theodore.

—— Schwäbi ch-augsburgisches Wörterbuch. *See* **Birlinger**, Anton.

—— The slang. *See* **H.**, J. C.

—— Spanish and English. *See* **Pineda**, Peter.

—— Swedish and English. *See* **Haud-lexikon.**

—— Synonymisches Handwörterbuch der deutschen Sprache. *See* **Rückert**, Friedrich.

—— Technisches Taschen-Wörterbuch für Industrie und Handel. *See* **Technisches** Taschen-Wörterbuch.

—— Technological. English-German-French. *See* **Franke**, *Prof.*

—— A universal pronouncing, of biography and mythology. *See* **Thomas**, J.

Digitized by Google

DICTIONARY. Wörterbuch der deutschen Sprache. *See* **Sanders**, Daniel.

Dictionnaire de l'industrie, manufacturière, commerciale, et agricole. *See* **Baudrimont**, A., and others.

——— de l'industrie; ou collection raisonnée des procédés utiles dans les sciences et dans les arts, par D. 3e éd. 6 v. 8°. *Paris*, 1800.

——— des origines, découvertes, inventions et établissemens. Par une société de gens de lettres. 3 v. 8°. *Paris*, 1777.

——— des sciences naturelles, dans lequel on traite méthodiquement des différens êtres de la nature, etc. Par plusieurs professeurs du Jardin du roi, et des principales écoles de Paris. Texte, 60 v. Planches, 12 v. 8°. *Strasbourg, Paris*, 1816–30.

——— général de la cuisine française ancienne et moderne, ainsi que de l'office et de la pharmacie domestique, etc., de M. de la Reynière. Suivi d'une collection générale des menus français et terminé par une pharmacopée. 8°. *Paris*, 1853.

——— pour la correspondance télégraphique secrète; précédé d'instructions détaillées, et suivi de la convention télégraphique internationale conclue à Paris le 17 mai 1865. Par un secrétaire de légation. 18°. *Paris*, 1867.

——— technologique, ou nouveau dictionnaire universel des arts et métiers et de l'économie industrielle et commerciale; par une société de savans et d'artistes. T. 1-22, 8°. Atlas, T. 1-2, 4°. *Paris*, 1822-35.

——— universel des arts et métiers, et de l'économie industrielle et commerciale. 6 v. et atlas. 2e éd. abrégé du grand dictionnaire de technologie, ou nouveau dictionnaire des arts et métiers. 8°. *Paris*, 1843.

Didot, Firmin, *frères*. Annuaire général du commerce, de l'industrie, de la magistrature et de l'administration; ou almanach des 500,000 adresses, de Paris, des départements et des pays étrangers. Publié par Firmin Didot frères. 8°. *Paris*, 1848–58.

——— Encyclopédie moderne, publiée par. *See* **Courtin**, E. M. P. M. A.

Diedtmann, J. A. Der Rothpapp und Dampffarbendruck. 8°. *Weimar*, 1855. **225 Neuer Schauplatz der Künste.**

Dieffenbach, Ernst. Annual report of the progress of chemistry: with the cooperation of. *See* **Liebig**, J. v., and **Kopp**, H.

——— Jahresbericht über die Fortschritte der Chemie, etc., unter Mitwirkung von. *See* **Liebig**, J. v., and **Kopp**, H.

DIES piscatoriæ. *See* **Norris**, Thaddeus.

Diete, Henri. Die vollständige Lehre der Mannsschneiderei, etc. *Illus.* 8°. *Weimar*, 1845. **121 Neuer Schauplatz der Künste.**

Dietrich, G. Th. Erster Bericht über einige Arbeiten der agriculturchemischen Versuchsstation des landwirthschaftlichen Central-Vereins zu Heidau. 8°. *Kassel*, 1862.

Digby, *Sir* Kenelme, *Kt.* The closet of the eminently learned Sir Kenelme Digby, Kt., opened: whereby is discovered several ways for making metheglin, syder, sherry-wine, together with excellent directions for cookery; as also for preserving, conserving, candying, etc. 3d ed. 24°. *London*, 1677.

DIGEST of American cases relating to patents, copyrights and trade marks, 1789–1862. *See* **Law**, S. D.

——— of patents issued by the United States, 1790–1839. *See* **Ellsworth**, Henry L.

——— of parliamentary law. *See* **Wilson**, O. M.

DIGESTION and the teeth. *See* **Nisbet**, Andrew.

——— The physiology of. *See* **Beaumont**, William.

Digny, *Le Comte de Cambray*. Discours sur le projet de loi pour la régie coïntéressée des tabacs, etc. 8°. *Firenze*, 1868. [2 copies.]

Dihm. Versuche, welche in der Borsig'schen Maschinen-Fabrik zu Berlin mit verschiedenen Eisenbahn-Wagen-Achsen von der, hierzu durch die im Februar 1850 statt gefundene Versammlung der deutschen Eisenbahn-Techniker ernannten Commission, angestellt worden sind. *Illus.* 4°. *Berlin*, 1850. pp. 56.

DIJON. Académie des sciences, arts et belles-lettres. Description d'un nouveau genre d'édenté fossile. *See* **Nodot**, L.

——— Académie des sciences, arts et belles-lettres. Mémoires. 2e série. T. 1 16, 1851–70. 8°. *Dijon*, 1852–73.

Digitized by Google

Dillenback, H. P. Medicated inhalation in the treatment of pulmonary consumption, bronchitis, asthma, catarrh, and clergymen's sore throat. 8°. *Boston*, 1857.

Dimond, E. W. The chemistry of combustion applied to the economy of fuel; with special reference to the construction of fire chambers for steam boilers. 8°. *Worcester*, 1867.

Dingler, Johann Gottfried. Polytechnisches Journal. B. 1–222, 1820–76. 8°. *Stuttgart, Augsburg*, 1820–76——.

"Dinks", Mayhew, and Hutchinson. The dog, by. Compiled, abridged, ed. and illustrated by Frank Forrester. 8°. *New York*, 1866.

Dinnen, John. On marine boilers. *See* **Tredgold,** T. **Steam** engine, 1st series, appendix.

DINNER, Search for a. *See* **Hare,** W. R.

DINNERS and housekeeping. *See* **Household manuals, v. 6.**

DIOPTRICS, Treatise of. *See* **Molyneux,** W.

DIORAMA. Procédés du diorama. *See* **Daguerre,** L. J. N.

DIPHTHERIA. *See* **Neidhard,** C.

DIPLOMACY. American diplomatic code: also, a concise diplomatic manual. *See* **Elliot,** J.

DIPTERA, Catalogue of North American, by R. Osten-Sacken. **Smiths'n misc. coll., v. 3.**

Dircks, Henry. The life, times and scientific labors of the 2d marquis of Worcester; to which is added a reprint of his century of inventions, 1663, etc. 8°. *London*, 1865.

—— Perpetuum mobile; or, search for self-motive power, during the 17th, 18th, and 19th centuries. 8°. *London*, 1861. 2d ed., 1876.

DIRECTORY. Ashcroft's railway. *See* **Ashcroft,** John.

—— The Boston, for 1875. *See* **Boston** directory.

—— Chicago, for 1872. *See* **Edwards's.**

—— Congressional. *See* UNITED STATES.

—— Gewerbe- und Handels-Adresszbuch für Würtemberg. *See* **Gewerbe-** und Handels-, etc.

—— The London post office, for 1868. *See* LONDON.

DIRECTORY, New Orleans and Lafayette. *See* NEW ORLEANS.

—— New York city. *See* NEW YORK city.

—— New York state business. *See* NEW YORK.

—— of booksellers, stationers, news dealers, and music dealers in the United States and Canada. 8°. *New York*, 1868.

—— Pettengill's newspaper, for 1877. *See* **Pettengill,** S. M.

—— Philadelphia. *See* **Gopsill.**

—— Providence. *See* PROVIDENCE.

—— Pugh's Queensland almanac, law calendar, directory, etc., for 1876. *See* **Pugh.**

—— Salt Lake City. *See* SALT LAKE CITY.

—— Zell's United States, for 1875. *See* **Zell's** directory.

DISCOVERERS. Stories of inventors and discoverers. *See* **Timbs,** J.

Discoveries and improvements in useful arts; particularly in the great branches of commerce, navigation and plantation in all parts of the known world. 8°. *London, n. d.*

—— Archives des découvertes. *See* **Archives.**

—— Curieuse et admirable découverte du mouvement perpétuel, de la quadrature du cercle, de la pierre philosophalle, et de la longitude. *See* **Curieuse** et admirable découverte.

—— Curiosités des découvertes. *See* **Curiosités.**

—— Dictionnaire abrégé des découvertes. *See* **Peigné,** A.

—— Exposition et histoire des découvertes. *See* **Figuier,** G. L.

—— Histoire des découvertes scientifiques modernes. *See* **Figuier,** L.

—— Historical account of. *See* **Williams,** J. F. S.

—— History of. *See* **Beckmann,** J.

—— History of. *See* **White,** F. S.

—— History of maritime and inland. *See* **Cooley,** W. D. **Lardner's cabinet cyclopædia, 60-62.**

—— Inquiry into the origin of the discoveries attributed to the moderns. *See* **Dutens,** L.

—— Nouveau dictionnaire des découvertes. *See* **Noël,** F. J., and **Carpentier,** L. J. M.

—— Railway magazine containing notices of scientific. *See* **Herapath,** J.

—— Retrospect of. *See* **Retrospect.**

DISCOVERY, Progress of. *See* **Webster,** J. W. **Boston** journal.

Digitized by Google

DISCOVERY, The Temple anecdotes of. *See* **Temple**, R. and C.

Disdéri. Manuel opératoire de photographie sur collodion instantané. 8° *Paris*, 1853. pp. 62.

——— Renseignements photographiques. 8°. *Paris*, 1855. pp. 46.

DISEASES of cattle in the United States. *See* UNITED STATES. **Department** of agriculture.

——— of the heart. *See* **Kneeland**, S., *jr.*

——— of the interior valley of North America. *See* **Drake**, Daniel.

——— of literary and sedentary persons. *See* **Tissot**, S. A.

——— Nomenclature of. *See* UNITED STATES. **Navy** department. Marine hospital service.

DISINFECTION. *See* **Bartholow**, Roberts.

DISPENSATORY (A), or commentary on the pharmacopœias of Great Britain and the United States. *See* **Christison**, Robert.

——— of the United States. *See* **Wood**, G. B., and **Bache**, F.

DISSECTIONS, Practical. *See* **Hodges**, Richard M.

DISSECTOR, The United States; or, lessons in practical anatomy. *See* **Horner**, William E.

DISSECTOR'S manual (The); or, practical and surgical anatomy. *See* **Wilson**, Erasmus.

DISSERTATIONS, University. Inaugural-Dissertation zur Erlangung der Doctorwürde der hochlöblich-n philosophischen Facultät zu Leipzig. *See* **Inaugural-Dissertation.**

DISTILLATION and strength of wines. *See* **Keene**, J. B.

——— Art du distillateur des eaux fortes, etc., par J. F. Demachy. PARIS. **Acad. des sc., arts et métiers, v. 37 and 12.**

——— Complete distiller. *See* **Byrn**, M. L.

——— De distillatione. *See* **Porta**, Johannes Baptista.

——— Destillirkunst. *See* **Schedell**, C. F. B. **24 Neuer Schauplatz der Künste.**

——— Der gesammte Brennerei-Betrieb, etc. *See* **Huss**, H.

——— Hall's distiller. *See* **Hall**, Harrison.

DISTILLATION. Illustrirtes Recept-Handbuch der praktischen Destillation, *See* **Hamm**, Wilhelm.

——— Manuel du distillateur. *See* **Lebaud.** and **Julia de Fontenelle**, J. S. E. **81 Manuels Roret.**

——— Manufacture and distillation of alcoholic liquors. *See* Duplais, *aîné et jeune.*

——— Maschinenwesen bei der Branntweinbrennerei. *See* **Schmidt**, Walther.

——— Neuerungen in der Brennerei, Brauerei, etc. *See* **Siemens**, Karl.

——— Practical. *See* **Gleaser**, T.

——— Practical distiller. *See* **Byrn**, M. La Fayette.

——— Progrès récents de la distillation. *See* **Savalle**, Désiré.

——— Traité de la. *See* **Payen**, A.

——— Traité de la distillation des alcools. *See* **Duplais**, P.

——— A treatise on. *See* **Porta**, Johannes Baptista.

DISTRICT of Columbia, United States statutes; relating to. *See* UNITED STATES. **Congress.** Revised statutes.

Disturnell, J. Influence of climate in North and South America; showing the varied climatic influences operating in the equatorial, tropical, sub-tropical, temperate, cold, and frigid regions. 8°. *New York*, 1867.

Ditscheiner, Leander. Optische und akustische Apparate. *See* VIENNA. **General-Direction der Weltausstellung 1873. Bericht. Gruppe 14.**

——— Telegraphen-Apparate. *See* VIENNA. **General-Direction der Weltausstellung 1873. Bericht. Gruppe 14.**

DIVINE providence. *See* **Swedenborg**, Emanuel.

Dixon, Francis B. The law of shipping and merchants' and shipmasters' guide. 8°. *New York*, 1850.

——— A practical treatise on the adjustment of general averages in the United States and other countries. 8°. *New York*, 1867.

Dobson, Edward. A rudimentary treatise on foundations and concrete works: with an account of the new mole executed in béton at the harbor of Algiers. *Illus.* 12°. *London*, 1850. **Weale's series, 44.**

——— A rudimentary treatise on the manufacture of bricks and tiles. Pt. 1, 2. *Illus.* 12°. *London*, 1850. **Weale's series, Nos. 23, 24.**

Digitized by Google

Dobson, Edward. A rudimentary treatise on masonry and stone-cutting. *Illus.* 12°. Atlas, 4°. *London*, 1849. **Weale's series, No. 25.**

——— Rudiments of the art of building. *Illus.* 12°. *London*, 1849. **Weale's series, No. 22.**

Docharty, Gerardus Beekman. Elements of plane and solid geometry, and of plane and spherical trigonometry,—to which is added mensuration, surveying and navigation. 8th ed. 8°. *New York* 1866.

Dochnahl, Friedrich Jakob. Der sichere Führer in der Obstkunde. 4 B. 18°. *Nürnberg*, 1856.

DOCKS. Bau des Slip und Trocken-Dock's in Triest. *See* **Heider,** E. J.

——— Dock yard economy and naval power. *See* **Barry,** P.

——— Naval dry docks of the United States. *See* **Stuart,** C. B.

——— Plans adopted at New York for docking ships: by H. Clarke. **Weale's papers on engineering, v. 4.**

Dodd, George. Curiosities of industry and the applied sciences. 8°. *London*, 1854.

CONTENTS.

i. Glass and its manufacture.
ii. Iron and its manufacture.
iii. Wood and its applications.
iv. Calculating and registering machines.
v. India rubber and gutta percha.
vi. Industrial applications of electricity.
vii. Gold: in the mine, mint and workshop.
viii. Paper: its applications and novelties.
ix. Printing: its modern varieties.
x. Cotton and flax: a contrast.
xi. Corn and bread: what they owe to machinery.
xii. A ship in the nineteenth century.
xiii. Fire and light: contrivances for their production.
xiv. Silk and wool; fur and feathers.
xv. Chemistry of manufactures.
xvi. Steam-power and water-power.
[Each paper is separately paged.]

——— Days at the factories: or, the manufacturing industry of Great Britain. *Illus.* 12°. *London*, 1843.

Dodge, J. R. West Virginia, its farms and forests, mines and oil-wells; with a glimpse of its scenery, a photograph of its population, and an exhibit of its industrial statistics. 12°. *Philadelphia*, 1865.

Dodge, Thomas H. Argument of counsel before Hon. Jas. Dunlop in the matter of the appeal of Albertus Larrowe, from the decision of Wm. D. Bishop, commissioner of patents. 8°. *Washington*, 1860. pp. 15.

Dodge, Thomas H.—Continued.

Dodge, W. C. Memorial to the secretary of war; or, how to strengthen our army and crush the rebellion, with a saving of life and treasure, by using breech-loading guns. 8°. *Washington*, 1864. pp. 12.

Döderlein, Ludwig. Hand-book of Latin synonymes, transl. by W. H. Arnold; with an introduction by S. H. Taylor. 12°. *Andover*, 1858.

Doebereiner, Franz. Cameralchemie für Land- und Forstwirthe, Techniker, etc. *Illus.* 2 B. 8°. *Dessau*, 1851-52.

——— Chemische Schule der Pharmacie, oder Handbuch der Pharmakochemie. 8°. *Leipzig*, 1861.

DOG, The. *See* **"Dinks", Mayhew,** and **Hutchinson.**

DOGS and their ways. *See* **Williams,** Charles.

Dollinger, Ignatz von. König Maximilian II. und die Wissenschaft. 8°. *München*, 1864. pp. 48.

——— Rede in der öffentlichen Sitzung der k. Akademie der Wissenschaften am 25. Juli 1873.—Zur Vorfeier des allerhöchsten Geburtsfestes Sr. Majestät des Königs Ludwig II. 4°. *München*, 1873.

DOLPHIN, Cruise of the United States brig. *See* **Lee,** S. P.

Dombasle, C. J. A. Mathieu de. Annales agricoles de Roville; ou mélanges d'agriculture, d'économie rurale, et de législation agricole. 7 v. [with supplement]. 8°. *Paris*, 1829.

Domenech, Em. Seven years' residence in the great deserts of North America. *Illus.* 2 v. 8°. *London*, 1860.

DOMESDAY book: Cornwall; photo-zincographed. *See* GREAT BRITAIN.

DOMESTIC animals, Breeding, etc., of. *See* **Moubray,** B.

——— ——— Maison rustique. *See* **Maison.**

——— ——— Nouveau manuel du bouvier et du zoophile. *See* **Nouveau, etc. 97 Manuels Roret.**

——— ——— a pocket manual of cattle, horse, and sheep husbandry; or, how to breed and raise the various tenants of the barnyard, etc. With a chapter on bee-keeping, by the author of "How to do business." 18°. *New York*, 1858.

Digitized by Google

DOMESTIC economy. *See* **Donovan, M. Lardner's cabinet cyclopædia, v. 126, 127.**

——— ——— Bibliotheca œconomica. *See* **Engelmann, W.**

——— ——— Confectioner, etc. *See* **Complete confectioner.**

——— ——— Curing, pickling and smoking meat and fish, etc. *See* **Robinson, J.**

——— ——— Dictionnaire de la cuisine française. *See* **Dictionnaire.**

——— ——— Domestic manual. *See* **Harwell, H. I.**

——— ——— Encyclopædia of. *See* **Webster, T.**

——— ——— Essays, economical, etc. *See* **Thompson, B.**

——— ——— Hints on. *See* **Bishop, T.**

——— ——— Housekeeping made easy. *See* **Ellis, *Mrs.***

——— ——— Industries italiennes à l'exposition universelle de Paris, 1867. *See* ITALY.

——— ——— Journal d'économie domestique. *See* **Journal d'agriculture.**

——— ——— Magazine of. *See* **Magazine of domestic economy.**

——— ——— Manual of. *See* **Tegetmeier, W. B.**

——— ——— Manuel du chocolatier, etc. *See* **Barretta, C. J.**

——— ——— Manuel d'économie domestique. *See* **Celnart, *Mme.* 117 Manuels Roret.**

——— ——— Manuel du pâtissier. *See* **Manuel. 89 Manuels Roret.**

——— ——— Modern housewife. *See* **Soyer, A.**

——— ——— More receipts. *See* **Leslie, E.**

——— ——— Oeconomisches Haus- und Kunst-Buch, oder Sammlung ausgesuchter Vorschriften. *See* **Krauss, Johann.**

——— ——— La pâtissière de la campagne et de la ville. *See* **Pâtissière.**

——— ——— Rapport sur les instruments aratoires et d'économie rurale et domestique. *See* **Héricart de Thury, L. E. F.**

——— ——— Receipts for the million. *See* **Hale, S. J.**

——— life in England, from the earliest period to the present time; with notices of origins, inventions, and modern improvements in the social arts: by the editor of the "Family manual and servant's guide." 24°. *London*, 1835.

DOMESTIC medicine. *See* **Coxe, Edward J.**

——— ——— *See* **Gunn, John C.**

——— ——— *See* **Scudder, John M.**

Domeyko, Ignacio. Araucania i sus habitantes. Recuerdos de un viaje hecho en los provincias meridionales de Chile, en las meses de enero i febrero de 1845. 8°. *Santiago*, 1845.

Don, George. A general history of dichlamydeous plants; together with the characters of the genera and species, and an enumeration of the cultivated varieties, their places of growth, time of flowering, etc. v. 1, Thalamifloræ; v. 2–3, Calycifloræ; v. 4, Corollifloræ. 4 v. 4°. *London*, 1831–38.

Donaldson, J. British agriculture: containing the cultivation of land, management of crops, and the economy of animals. roy. 8°. *London*, 1860.

——— Rudimentary treatise on clay lands and loamy soils. 12°. *London*, 1852. **Weale's series, No. 66.**

——— A treatise on manures; their nature, preparation and application, with a description and use of the most approved British grasses, etc. *Illus.* 8°. *London*, 1842.

Donlevy, John. The rise and progress of the graphic arts; including notices of illumination, chalcography, woodengraving, typography, lithography, chromography and intaglography; elucidating the art of chromo-glyphotype. 4°. *New York*, 1854. pp. 24.

Donn, Benjamin. Mathematical essays; being essays on vulgar and decimal arithmetic; containing not only the practical rules, but also the reasons and demonstrations of them. 8°. *London*, 1758.

Donovan, Michael. Domestic economy. v. 1. Brewing; distilling; wine making; baking, etc.; v. 2. Human food, animal and vegetable. 2. v. 16°. *London*, 1837–42. **Lardner's cabinet cyclopædia, v. 126, 127.**

——— A treatise on chemistry. 4th ed. 24°. *London, n. d.*

Doolittle, I. Manuel de l'ingénieur; trad. par. *See* **Evans, O.**

DOOR-SPRINGS. Abridgments English Patents, No. 59.

Digitized by Google

Dorn, Alexander. Pflege und Förderung des gewerblichen Fortschrittes durch die Regierung in Württemberg. 8°. *Wien,* 1868.

Dornfeld, J. Die Geschichte des Weinbaues in Schwaben. 8°. *Stuttgart,* 1868.

——— Der rationelle Weinbau und die Weinbereitungs-Lehre, mit einem Anhang über den Einfluss der climatischen Verhältnisse auf den Weinbau. 8°. *Heilbronn,* 1864.

——— Weinbauschule, oder Anleitung zur Pflanzung der Rebe und Gewinnung des Weins. 8°. *Stuttgart.* 1859.

Douai, Adolf. Turner-Schulbücher, Nro. I. Bilder-Fibel und erstes deutsches Lesebuch. 12°. *New York,* 1866.

Doublette, Desbois. Art de la peinture en bâtimens et des décors, y compris le badigeon et la teinture des papiers. 18°. *Paris,* 1828. **Encyclopédie populaire, v. 2.**

——— Art du vitrier. 18°. *Paris,* 1828. **Encyclopédie populaire, No. 3.**

Dougall, James Dalziel. The rifle simplified; a treatise on that important weapon, and its efficiency for national defence. 16°. *Glasgow,* 1850. pp. 43.

Douglas, *Sir* Howard. An essay on the principles and construction of military bridges; and the passage of rivers in military operations. 2d ed. 8°. *London,* 1832.

——— On naval warfare with steam. 8°. *London,* 1858.

——— A postscript to the section on iron defences, contained in the 5th ed. of "Naval gunnery," in answer to the erroneous principles set forth by the reviewer in "The quarterly review" for Oct., 1860. 8°. *London,* 1860. pp. 60.

——— A treatise on naval gunnery. 2d ed. 8°. *London,* 1819. *Also,* 4th ed., 1855, and 5th ed., 1860.

Douglas, J. S. Practical homœopathy for the people. 8th ed. 16°. *Chicago,* 1868.

Douglas, James. A dissertation on the antiquity of the earth. 4°. *London,* 1790. pp. 36.

Douglas, John Christie. A manual of telegraph construction: the mechanical elements of electric telegraphic engineering; with diagrams. 12°. *London,* 1875.

Doüin, *Madame.* The Spanish primer; transl. from the French of Mme. Doüin, by John McIntosh. 24°. *New York,* 1846. pp. 70.

Dove, Heinrich Wilhelm. Darstellung der Farbenlehre und optische Studien. 8°. *Berlin,* 1853.

——— Über Wirkungen aus der Ferne. Eine am 1. März im Vereine für wissenschaftliche Vorträge gehaltene Vorlesung. sm. 8°. *Berlin,* 1845. pp. 44.

——— and **Moser,** L. Repertorium der Physik enthaltend eine vollständige Zusammenstellung der neuern Fortschritte dieser Wissenschaft. 6 B. 8°. *Berlin,* 1837–42.

Dove, Patrick Edward. The revolver: its description, management, and use; with hints on rifle clubs and the defence of the country. 8°. *Edinburgh,* 1857. pp. 51. [Another ed., 1858.]

Dowdeswell, George Morley. Law of evidence; ed. by. *See* **Starkie,** T.

Dowie, James. The foot and its covering; comprising a full translation of Dr. Camper's work on "The best form of shoe." 8°. *London,* 1861.

Downes, John. Occultations visible in the United States, 1851, 1852; computed by. **Smiths'n contrib., v. 2, 3, and 6.**

Downes, Olinthus Gregory. On the physical constitution of comets. 4°. *London,* 1860. pp. 45.

Downing, Andrew Jackson. The architecture of country houses; designs for cottages, farm-houses and villas; remarks on interiors, furniture, and the best modes of warming and ventilating. *Illus.* 8°. *New York,* 1861. Same, 1866.

——— Hints to persons about building in the country. Hints to young architects calculated to facilitate their practical operations; by Geo. Wightwick. 3d Amer. ed. 8°. *New York,* 1859.

——— Horticulturist; ed. by. *See* **Horticulturist.**

——— Rural essays: memoirs, horticulture, landscape gardening, rural architecture, trees, agriculture, fruit, and letters from England; edited with a memoir of the author, by Geo. W. Curtis; and a letter to his friends, by Frederika Bremer. 8°. *New York,* 1853.

Digitized by Google

Downing, Andrew Jackson. A treatise on the theory and practice of landscape gardening, adapted to North America: with remarks on rural architecture. 5th ed. *Illus.* 8°. *New York*, 1853.

Downing, Beal P. Doctor Downing's reformed practice, and family physician. 8°. *Utica*, 1851.

Downing, Samuel. Elements of practical construction, for the use of students in engineering and architecture. Part 1. Structures in direct tension and compression: with atlas of plates, and illustrations. 8°. *London*, 1875.

Doyle, Edward. The improved pocket reckoner, for timber, plank boards, saw logs, wages, board, distances on the canals, interest, etc. 24°. *New York*, 1847. pp. 71.

Dragendorff, Georg. Die gerichtlich-chemische Ermittelung von Giften in Nahrungsmitteln, Luftgemischen, Speiseresten, Körpertheilen, etc. 8°. *St. Petersburg*, 1868.

DRAINAGE. *See* **Jourdier,** A.

——— Drains, drain tiles and pipes. **Abridgments English Patents, No. 1.**

——— Draining for profit, and draining for health. *See* **Waring,** George E., *jr.*

——— Du desséchement du lac de Harlem. *See* **Endegeest,** Gevers d'.

——— État du drainage en France. *See* **Straten-Ponthoz,** F. van der.

——— Études pratiques sur l'art du dessécher. *See* **Bryas,** Charles de.

——— Instructions sur le drainage. *See* FRANCE.

——— of land, The principles and practice of. *See* **Klippart,** John H.

——— of land, A treatise on the practical. *See* **Hutchinson,** Henry.

——— The sanitary drainage of houses and towns. *See* **Waring,** George E., *jr.*

——— Sanitary work in smaller towns and villages. *See* **Slagg,** Charles.

——— Traité de drainage. *See* **Leclerc,** J. M. J.

——— Treatise on drainage of districts and lands. *See* **Dempsey,** G. D. **Weale's series, No. 29.**

——— Treatise on drainage of towns and buildings. *See* **Dempsey,** G. D. **Weale's series, No. 30.**

——— Utilization of sewage, etc. *See* **Menzies,** William.

Drake, Daniel. A systematic treatise, historical, etiological and practical, on the principal diseases of the interior valley of North America. 8°. *Cincinnati*, 1850. 2d series, 1854.

Dralet. L'art du taupier ou méthode amusante et infaillible de prendre les taupes. 24°. *Paris*, 1829.

DRAMATISTS, Lives of British. *See* **Dunham,** S. S., and others. **Lardner's cabinet cyclopædia, 96, 97.**

Draper, George, *and son.* Improvements in cotton machinery for carding, drawing, roving, spinning, warping, dressing, weaving, etc. 8°. *Hopedale, Mass.*, 1872.

Draper, L. C., and **Croffut,** W. A. A helping hand for town and country: an American home book of practical and scientific information concerning house and lawn, garden and orchard, field, barn and stable, apiary and fish pond, work shop and dairy, etc. roy. 8°. *Cincinnati*, 1870.

Drapiez. Abrégé du grand dictionnaire de technologie; ou, nouveau dictionnaire des arts et métiers de l'économie industrielle et commerciale; par MM. Francœur, Robinet, Payen, et Pelouze. 2 v. roy. 8°. *Bruxelles*, 1837.

DRAWING. Academie der zeichnenden Künste und der Malerei. *See* **Hertez,** A. W. **134 Neuer Schauplatz der Künste.**

——— American drawing-book. *See* **Chapman,** J. G.

——— and mensuration. *See* **Davies,** Charles.

——— and painting, Art of. *See* **Phillips,** G. F.

——— and painting in water colors. *See* **Art of drawing and painting.**

——— Argentoratensis graphice. *See* **Schefferus,** Joannes.

——— book. *See* **Lock,** M.

——— Cyclopædia of. *See* **Worthen,** E. E.

——— Essai sur l'art de tracer la menuiserie et les objets mécaniques. *See* **Poncelet,** Martin.

——— General art of. *See* **Gerhard.**

——— in water-colours. *See* **Hassell,** J.

——— Industrial drawing, etc. *See* **Mahan,** D. H.

——— instruments. *See* **Stanley,** William Ford.

——— instruments, Treatise on. *See* **Simms,** F. W.

Digitized by Google

DRAWING. Inventive drawing, etc. *See* **Ball**, Edward.

——— Lehrbuch der Reisskunst. *See* **Thon**, T. **55 Neuer Schauplatz der Künste.**

——— Manual for teaching model drawing. *See* **Williams**, Butler.

——— Manuel du dessinateur. *See* **Perrot**, A. M. **24 Manuels Roret.**

——— models. *See* **Harding**, J. D.

——— The national drawing-master. *See* **Nicholls**, W. A.

——— Plane and perspective. *See* **Brainerd**, Jehu.

——— Practical draughtsman. *See* **Armengaud**, J. E. and C., and **Amouroux**, J.

——— The self-aid cyclopædia, comprising drawing, etc. *See* **Burn**, Robert Scott.

——— Topographical. *See* **Enthoffer**, J.

——— ——— *See* **Smith**, R. S.

——— A treatise on. *See* **Phillips**, G. F.

——— Treatise on isometrical drawing, etc. *See* **Sopwith**, T.

——— without a master. *See* **Cavé**, Marie Elizabeth.

——— Zeichnen und Kunstunterricht, von Joseph Langl. *See* VIENNA. **General-Direction der Weltausstellung 1873. Bericht. Gruppe 26.**

Dray, William, *et cie.* Concours universel agricole de Paris, mai et juin, 1856. Prix-courant de. 8°. *Paris*, 1856. pp. 47.

Dredge, James. Principles of Dredge's suspension bridge. *See* **Weale**, J. **Theory** of bridges.

DREDGING machine. **Weale's papers on engineering, v. 1, 2.**

Drée, M. E., *Marquis* de. Description raisonnée de la charrue à soc mobile. 8°. *Paris*, 1827. pp. 36.

Drehkunst, Die, in ihrem ganzen Umfange. Nach dem Französischen frei bearbeitet, etc. von C. H. Schmidt. *Illus. Weimar*, 1843. **15 Neuer Schauplatz der Künste.**

Dreisbach, J. S., and **Nagel**, P. The painter's guide: containing the most valuable receipts on graining, staining, painting, gilding, bronzing, frosting, varnishing, polishing, and paper hanging, etc. 12°. *Bath, Pa.*, 1855.

DRESDEN. Bibliothek der technischen Bildungsanstalt zu Dresden. Katalog. 8°. *Dresden*, 1843.

——— Kön. Sächsische polytechnische Schule zu Dresden. Mittheilungen. Heft 2. roy. 8°. *Leipzig*, 1869.

DRESDEN. Verein zu Rath und That in Dresden. Mittheilungen über die Wirksamkeit des. 4°. *Dresden.*

Dresdner Gewerbeverein-Zeitung. Organ der Sächsischen Gewerbevereine. Jahrg. 1-3, 1868-70. 4°. *Dresden*, 1868-70.

DRESS, The anatomy of. *See* **Anatomy.**

——— The corset and crinoline. *See* **L.**, W. B.

Drew, William A. Glimpses and gatherings during a voyage and visit to London and the Great Britain exhibition, in the summer of 1851. 8°. *Augusta*, 1852.

Drewry, Charles Stewart. Memoir of suspension bridges; history of their origin and progress; their application to civil and military purposes: account of experiments on the strength of iron wires and bars; rules and tables for facilitating computations relating to suspension bridges. *Illus.* 8°. *London*, 1832.

Dreysze, Nicolaus. Abhandlung über die von des Königs Majestät von Preuszen allergnädigst patentirten Zündnadelgewehre, erfunden von Nicolaus Dreysze. 8°. *Weiszensee*, 1830. pp. 10.

Drigg, S. B. Pianofortes; invented by. *See* Wallace piano-forte co.

DRILL, Derrick and. *See* **Derrick.**

Drion, Ch., and **Fernet**, É. Traité de physique élémentaire. 3e éd. par É. Fernet. 8°. *Paris*, 1869.

Drisler, Henry. Greek-English lexicon; with corrections and additions by. *See* **Liddell**, H. G., and **Scott**, R.

Droit du Sund et le commerce du monde. Traduit de l'allemand. 8°. *Stettin*, 1854 pp. 44.

Droz, François Xavier Joseph. Économie politique; ou, principes de la science des richesses. 8°. *Paris*, 1829.

DRUGGIST'S directory,—American and European. *See* **American** and European.

DRUGS, medicines, etc. **Abridgments English Patents, No. 25.**

——— medicines, chemicals, etc. *See* **Peirce**, C. H.

Drummond, J. Elements of geology; transl. by. *See* **Bischof**, K. G.

Drummond, T. The young ladies and gentlemen's auxiliary in taking heights and distances, containing the use of the small pocket case of mathematical instruments: illustrated by practical geometry. Pt. 1. 2d ed. 18°. - *Norwich, s. d.*

Digitized by Google

DRY collodion processes. *See* **Sutton**, Thomas.

—— rot in timber; prevention and cure. *See* **Britton**, Thomas Allen.

Dub, August. Manuel concernant la connaissance, la fabrication, le maniement, la compatibilité des armes à feu; de leurs munitions ainsi que les exercices, dans les régiments d'infanterie de ligne de l'armée autrichienne. Traduit par Rieffel. *Illus.* 8°. *Paris*, 1858.

Dub, Julius. Die Anwendung des Elektromagnetismus, mit besonderer Berücksichtigung der neueren Telegraphie und den in der deutschen Telegraphenverwaltung bestehenden technischen Einrichtungen. 2te Auflage. 8°. *Berlin*, 1873.

—— Der Electromagnetismus. *Illus.* 8°. *Berlin*, 1861.

Du Barry, Edmund L. The United States: its power and progress; transl. by. *See* **Pousain**, G. T.

Dubied. Dictionnaire des arts, etc. *See* **Laboulaye**, C. P. L.

Dubief, L. F. Manuel théorique et pratique du fabricant de cidre et de poiré, avec les moyens d'imiter avec le suc des pommes ou des poires, le vin de raisin, l'eau de vie et le vinaigre de vin; suivi de l'art de faire les vins de fruits et les vins de liqueurs artificiels. 18°. *Paris*, 1834. **102 Manuels Roret.**

DUBLIN. International exhibition of 1865. The illustrated record and descriptive catalogue. Compiled by Henry Parkinson and P. L. Simmonds. 8°. *London*, 1866.

—— pharmacopœia, Translation of the new, by J. B. Nevins. *See* LONDON pharmacopœia.

—— Resources of Ireland, as illustrated by the exhibition of 1853. *See* **Sproule**, J.

Du Bois, A. Jay. Strength and determination of the dimensions of iron and steel. *See* **Weyrauth**, Phil. Jacob J.

Dubois, N. A. Nouveau manuel complet de mythologie. 18°. *Paris*, 1836. **16 Manuels Roret.**

Dubois, Pierre. Collection archéologique du prince Pierre Soltykoff. Horlogerie; description et iconographie des instruments horaires du XVIe siècle, précédée d'un abrégé historique de l'horlogerie au moyen âge et pendant la renaissance, suivie de la bibliographie complète de

Dubois, Pierre—Continued.
l'art de mesurer le temps. 4°. *Paris*, 1858.

Dubois, William E. A manual of gold and silver coins. *See* **Eckfeldt**, J. R.

Du Bois-Reymond, Emil. Gesammelte Abhandlungen zur allgemeinen Muskel- und Nervenphysik. B. 1, 2. *Illus.* 8°. *Leipzig*, 1875, 1877.

Du Breuil, Alphonse. Grundzüge der Landwirthschaft; nach dem Cours d'agriculture de. *See* **Hamm**, W.

Dubrunfaut. Art de fabriquer le sucre de betteraves, etc. 8°. *Paris*, 1825.

Duchenne de Boulogne. Die örtliche Anwendung der Elektricität in der Physiologie, Pathologie und Therapie. Mit Zugrundlegung von: Duchenne de Boulogne, de l'électrisation localisée et de son application à la physiologie, à la pathologie et à la thérapeutique. Paris, 1855. Bearbeitet von B. A. Erdmann. *Illus.* 8. *Leipzig*, 1858.

Duckett, George F. Technological military dictionary, German-English-French. New rev. ed. 8°. *London*, 1847.

Dudiu. Art du relieur doreur de livres. PARIS. **Acad. des sc., arts et métiers, v. 33 and 8.**

DUDLEY observatory. *See* ALBANY, N. Y.

Duff, P. North American accountant; embracing single and double entry book-keeping, etc. roy. 8°. *New York*, 1854.

—— The steamboat accountant: a new and complete system of book-keeping. roy. 8°. *New York*, 1847.

Duflas, Adolf. Handbuch der angewandten pharmaceutisch- und technisch-chemischen Analyse. 8°. *Breslau*, 1871.

—— Handbuch der angewandten pharmaceutisch- und technisch-chemischen Analyse. Ein Ergänzungsband. 8°. *Breslau*, 1871.

Duggan, George. Specimens of the stone, iron and wood bridges, viaducts, tunnels, culverts, etc, of the United States railroads, illustrated by drawings from actual measurement of the works; including plans, elevations, sections and details: and an appendix, illustrative of the art of bridge building in Europe. *Illus.* fol. *New York*, 1850.

Duhamel. Cours d'analyse de l'école polytechnique. 2 v. 8°. *Paris*, 1841.

Digitized by Google

Duhamel du Monceau, Henri Louis. Art du cartier. PARIS. **Acad. des sc., arts et métiers, v. 33 and 4.**

——— Art du chandelier. PARIS. **Acad. des sc., arts et métiers, v. 39 and 6.**

——— Art du charbonnier. PARIS. **Acad. des sc., arts et métiers, v. 1 and 2.**

——— Art du cirier. PARIS. **Acad. des sc., arts et métiers, v. 39 and 14.**

——— Art de convertir le fer en tôl. PARIS. **Acad. des sc., arts et métiers, v. 8 et 15.**

——— Art du couvreur. PARIS. **Acad. des sc., arts et métiers, v. 14 and 4.**

——— Art de la draperie. PARIS. **Acad. des sc., arts et métiers, v. 30 and 7.**

——— Art de l'épinglier, par Réaumur; avec des additions par. PARIS. **Acad. des sc., arts et métiers, v. 8.**

——— Art de faire les colles. PARIS. **Acad. des sc., arts et métiers, v. 40 and 8.**

——— Art de faire les pipes à fumer le tabac. PARIS. **Acad des sc., arts et métiers, v. 1 and 8.**

———Art de faire les tapis, façon de Turquie. PARIS. **Acad. des sc., arts et métiers, v. 30 and 7.**

——— Art de friser, ou raffiner les étoffes de laine. PARIS. **Acad. des sc., arts et métiers, v. 30 and 7.**

——— Art du potier de terre. PARIS. **Acad. des sc., arts et métiers, v. 13 and 8.**

——— Art de raffiner le sucre. PARIS. **Acad. des sc., arts et métiers, v. 40 and 15.**

——— Art du savonnier. PARIS. **Acad. des sc., arts et métiers, v. 39 and 8.**

——— Art du serrurier. PARIS. **Acad. des sc., arts et métiers, v. 12 and 6.**

——— Fabrique de l'amidon. PARIS. **Acad. des sc., arts et métiers, v. 40 and 8.**

——— Fabrique des ancres par Réaumur, avec des additions par. PARIS. **Acad. des sc., arts et métiers, v. 8.**

——— De la forge des enclumes. PARIS. **Acad. des sc., arts et métiers, v. 8 and 15.**

——— and **de La Marre.** Traité des pesches. PARIS. **Acad. des sc., arts et métiers, v. 34, 36, and 5, 10, 11.**

——— **Fourcroy de Ramecourt,** C. R., and **Gallon.** Art du tuilier et du briquetier. PARIS. **Acad. des sc., arts et métiers, v. 14 and 4.**

Duhent, Louis. Transformation du matériel de l'artillerie; le canon prussien; et un canon belge rayé se chargeant par la culasse. 8°. *Bruxelles*, 1861. pp. 30.

Du Huÿs, Charles. The Percheron horse. Transl. from the French. *Illus.* 12°. *New York*, 1868.

Dujardin, Felix. Écho du monde savant, pub. par. *See* **Écho.**

Dumas, J. Brunnen-Ingenieur. In's Deutsche übertragen von Chr. H. Schmidt. *Illus.* 8°. *Weimar*, 1857. **233 Neuer Schauplatz der Künste.**

Dumas, Jean Baptiste. Album de l'exposition universelle; par concours de. *See* **Brisse,** L.

——— Traité de chimie, appliquée aux arts. T. 1–8. Atlas, T. 1–2, 4°, in 1 v. 8°. *Paris*, 1828–46.

Du Moncel, Th. Étude de magnétisme et de l'électro-magnétisme au point de vue de la construction des électro-aimants. 8°. *Paris*, 1858.

——— Exposé des applications de l'électricité. T. 1. Notions technologiques. T. 2. Applications mécaniques de l'électricité. T. 3. Applications mécaniques, physiques et physiologiques. 2e éd. 3 v 8°. *Paris*, 1856–57.

——— Same. 3e éd. entièrement refondue. 2 v. 8°. *Paris*, 1872–73.

——— Notice sur l'appareil d'induction électrique de Ruhmkorff. *Illus.* 5e éd. 8°. *Paris*, 1867.

——— Traité théorique et pratique de télégraphie électrique, à l'usage des employés télégraphistes, des ingénieurs, des constructeurs et des inventeurs. *Illus.* 8°. *Paris*, 1864.

Dumont, Aristide. Les eaux de Lyon et de Paris. Description des travaux exécutés à Lyon pour la distribution des eaux du Rhône filtrées, et projet pour alimenter Paris en eau de Seine pour drainer et assainir cette capitale, suivi d'une pratique des distributions d'eau en général. Avec un atlas de 25 planches. 4°. *Paris*, 1862.

Dumreicher, A. v. Gewerbliches Unterrichtswesen. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Duncan, Andrew. The practical surveyor's guide: containing the necessary in-

Digitized by Google

Duncan, Andrew—Continued.
formation to make any person of common capacity a finished land surveyor. 18°. *Philadelphia*, 1854.

Duncan, P. Martin. The great extinct quadrupeds. **Science lectures for the people, series 7.**

——— and **Millard,** William. A manual for the classification, training and education of the feeble-minded, imbecile and idiotic. 8°. *London*, 1866.

Dunglison, Robley. Cyclopædia of practical medicines, etc. Revision and additions. *See* **Forbes,** John.

——— Medical lexicon: a dictionary of medical science; with French and other synonymes. Revised and very greatly enlarged. 8°. *Philadelphia*, 1857. Also, rev. ed. 1858.

Dunham, S. Astley. History of Denmark, Sweden and Norway. v. 1-3. 16°. *London*, 1839-40. **Lardner's cabinet cyclopædia, v. 57-59.**

——— History of Europe during the middle ages. v. 1-4. 16°. *London*, 1834. **Lardner's cabinet cyclopædia, v. 48-51.**

——— History of the Germanic empire. v. 1-3. 16°. *London*, 1835. **Lardner's cabinet cyclopædia, v. 28-30.**

——— History of Poland. 16°. *London*, 1831. **Lardner's cabinet cyclopædia, v. 56.**

——— History of Spain and Portugal. v. 1-4. 16°. *London*, 1832. **Lardner's cabinet cyclopædia, v. 23-27.**

——— and **Bell,** R. Lives of the most eminent literary and scientific men of Great Britain. Early writers. 16°. *London*, 1840. **Lardner's cabinet cyclopædia, v. 95.**

——— **Bell,** R., and others. Lives of the most eminent literary and scientific men of Great Britain. Dramatists. v. 1, 2. **Lardner's cabinet cyclopædia, v. 96, 97.**

Dünkelberg, F. W. Der Nassauische Weinbau, eine Skizze der klimatischen Boden- und Cultur-Verhältnisse des Rheingau's. 8°. *Wiesbaden*, 1867.

DUNKIRK. Importance de Dunkerque. *See* **Steele,** R.

Dunlap, James D. A book of forms: containing more than twelve hundred forms for practice in the courts of Pennsylvania and of the United States, and

Dunlap, James D.—Continued.
for conveyancing, etc. 3d ed. 8°. *Philadelphia*, 1854.

Dunlap, S. F. Vestiges of the spirit-history of man. 8°. *New York*, 1858.

Dunlop, James. Decision in the matter of the appeal of Jas. G. Wilson, assignee of Aikens and Felthousen, from the decision of the commissioner of patents in favor of Wheeler, Potter, et als., assignees of A. B. Wilson. 8°. *Nashua*, 1863. pp. 10.

Dunn, Matthias. A treatise on the winning and working of collieries; including numerous statistics and remarks on ventilation. *Illus.* 8°. *Newcastle-upon-Tyne*, 1848.

Dunning, Edward J. *See* **American** journal of dental science.

Dunoyer, Charles. De la liberté du travail; ou, simple exposé des conditions dans lesquelles les forces humaines s'exercent avec le plus de puissance. 8° *Bruxelles*, 1846.

Duparcq, Nicolas Édouard Delabarre. *See* **Delabarre-Duparcq,** N. É.

Dupin, *Baron* Charles. Mathematics practically applied to the useful and fine arts: geometry of the arts. Adapted to the state of the arts in England; by George Birkbeck. 8°. *London*, 1827.

Duplais, P. Traité des liqueurs et de la distillation des alcools. T. 1-2. 8°. *Versailles*, 1855.

Duplais, *aîné et jeune.* A treatise on the manufacture and distillation of alcoholic liquors; comprising accurate and complete details in regard to alcohol from wine, molasses, beets, grain, rice, potatoes, sorghum, asphodel, fruits, etc.: with the distillation and rectification of brandy, whiskey, rum, gin, Swiss absinthe, etc.: the preparation of aromatic waters, volatile oils or essences, sugars, syrups, aromatic tinctures, liqueurs, etc Transl. and ed. from the French, by M McKennie. To which is added the United States internal revenue regulations for the assessment and collection of taxes on distilled spirits. *Illus.* 8°. *Philadelphia, London* 1871.

Duport, St. Clair. De la production des métaux precieux du Mexique. Atlas 4°. *Paris*, 1843. [Text missing.]

Digitized by Google

Durand, B. Reports on the standard weights, measures, and coins exchanged between France and the United States. *See* **Vattemare,** Alexander.

Durand, F. Lehrbuch der Reizkunst. Hrsg. v. *See* **Thon,** T. **55 Neuer Schauplatz der Künste.**

Durand-Fardel, M., **Le Bret,** Eugène, **Lefort,** J., and **François,** M. Jules. Dictionnaire général des eaux minérales et d'hydrologie médicale. 2 v. 8°. *Paris,* 1860.

Durant, Ghislani. Hygiene of the voice: its physiology and anatomy. 8°. *New York,* 1870.

Durantin, Armand. La littérature et les beaux arts. *See* **Écho** de la littérature.

Durenne, A. Dessins des ornemens et autres objets en fonte de fer, qui se trouvent chez. 8°. *Paris.*

Dürre, Ernst Friedrich. Ueber die Constitution des Roheisens und den Werth seiner physikalischen Eigenschaften, etc. 8°. *Leipzig,* 1868.

——— Wissenschaftlich technisches Handbuch des gesammten Eisengiessereibetriebes. B. 1–2. 8°. *Leipzig,* 1870–75.

Dussauce, H. A general treatise on the manufacture of soap, theoretical and practical: comprising the chemistry of the art, a description of all the raw materials and their uses. 8°. *Philadelphia and London,* 1869.

——— A general treatise on the manufacture of vinegar, theoretical and practical; comprising the chemical principles involved in the preparation of acetic acid, and its derivatives. Also a treatise on acetimetry. 8°. *Philadelphia and London,* 1871.

——— A new and complete treatise on the arts of tanning, currying, and leather dressing; comprising all the discoveries and improvements made in France, Great Britain, and the United States. 2d ed. *Illus.* 8°. *Philadelphia and London,* 1867.

——— A practical treatise on the fabrication of matches, gun cotton, colored fires and fulminating powders. 8°. *Philadelphia,* 1864.

——— Treatise on the coloring matters derived from coal tar: their practical application in dyeing cotton, wool and silk. 12°. *Philadelphia,* 1863.

——— Treatise on perfumery: transl. by. *See* **Pradal,** F., and **Malepeyre,** F.

Dussard. Art de fabriquer les savons 18°. *Paris,* 1829. **Encyclopédie populaire, v. 4.**

DUTCH-English dictionary. *See* **Bomhoff,** D.

——— India. Tijdschrift voor Nijverheid in Nederlandsch Indië. *See* **Tijdschrift** voor Nijverheid.

——— Pennsylvania. *See* **G.**

Dutens, Louis. An inquiry into the origin of the discoveries attributed to the moderns. Transl. from the French of Mr. Dutens. 8°. *London,* 1769.

DUTIES, Tables showing the rates of. *See* UNITED STATES. **Treasury** department.

Duval, Charles, **Kaufmann,** A., and **Renaud,** E. Architecture rurale et communale. Petites maisons de plaisance et d'habitation choisies aux environs de Paris, etc. 2e éd. fol. *Paris,* 1853.

Duvernay, *aîné.* Culture des abeilles dans une nouvelle ruche à étages. Partie 1. L'histoire naturelle de ces insectes. 2. La construction d'une ruche à étages. 3. La manière de gouverner les ruches. 8°. *Grenoble,* 1836.

DWELLINGS, Laborers'. Allgemeine Bildungsmittel. Arbeiterwohnungen. Von Carl Th. Richter. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 26.**

——— of the middle classes. Bürgerliches Wohnhaus. Von Carl Th. Richter. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 19.**

Dwight, M. A. Introduction to the study of art. 12°. *New York,* 1856.

——— Lecture on art: introductory to a course upon the arts of design. 8°. *Philadelphia,* 1851. pp. 36.

Dwinelle, William H. *See* **American** journal of dental science.

DYALLING, Geometrical. *See* **Collins,** John.

Dyche, Thomas, and **Pardon,** William. A new general English dictionary. 8°. *London,* 1758.

DYEING. Abridgments English Patents, No. 14.

——— and bleaching, Elements of the art of. *See* **Berthollet,** C. L. and A. B.

——— and calico printing, Dictionary of. *See* **O'Neill,** Chas.

——— and callicoe printing. *See* **Cooper,** Thomas.

Digitized by Google

DYEING and printing calico. *See* **Crookes**, William.

——— and scouring. *See* **Love**, Thomas.

——— Appréteur, Färber und Bleicher. *See* **Meissner**, G.

——— Art de la teinture de la soie, du coton, du lin, et des toiles imprimées. *See* **Martin**, E. **Encyclopédie populaire, v. 12.**

——— Art de la teinture de la soie, par P. J. Macquer. PARIS. **Acad. des sc., arts et métiers, v. 29.**

——— Art of. *See* **Napier**, J.

——— Art of, simplified. *See* **Tamoney**, Patrick.

——— Chemistry of. *See* **O'Neill**, C.

——— Chimie du teinturier. *See* **Martin**, E. **Encyclopédie populaire, v. 13.**

——— cleaning, scouring and finishing. *See* **Love**, T.

——— Coloring matters derived from coal tar. *See* **Dussauce**, H.

——— The dyer and colour maker's companion. *See* **Dyer** and colour maker's companion.

——— The dyer's instructor. *See* **Smith**, David.

——— Die englische Färberei. *See* **Smith**, D. **193 Neuer Schauplatz der Künste.**

——— Das Färben und Appretiren der sämmtlichen Pelzwaaren. *See* **Schrader**, Hermann.

——— Färber nach den Anforderungen der Gegenwart. *See* **Schrader**, Hermann.

——— Färberei der Gespinnste und Gewebe. *See* **Reimann**, M.

——— Färbers Taschenbuch. Hülfsbuch für Färber. *See* **Färbers** Taschenbuch.

——— Die Farbwaarenkunde. *See* **Schmidt**, C. H. **198 Neuer Schauplatz der Künste.**

——— Fortschritte in der Färberei. *See* **Frohwein**, F.

——— Guide du teinturier. *See* **Fol**, Frédéric M.

——— Handbuch der Färberei. *See* **Riffault. 21 Neuer Schauplatz der Künste.**

——— Der Kleinigkeitsfärber. *See* **Scherf**, C. F. **132 Neuer Schauplatz der Künste.**

——— Lehrbuch der Färberei. *See* **Vitalis**, J. B. **6 Neuer Schauplatz der Künste.**

——— Manual of receipts for. *See* **Napier**, J.

——— Manuel du teinturier. *See* **Riffault. 71 Manuels Roret.**

DYEING. Neueste Resultate aus der Färberei. *See* **Schrader**, Hermann.

——— Praktische Familien-Färber. *See* **Kuder**, S.

——— Prüfung der Zeugfarben und Farbmaterialien. *See* **Stein**, W.

——— Recent improvements and progress in. *See* **Calvert**, F. C.

——— Teintures à mordant. *See* **Laer**, G. von.

——— Traité des matières colorantes. *See* **Schutzenberger**, M. P.

——— Uebersichtliche Darstellung der aus dem Steinkohlentheer erzeugten und abgeleiteten Färbstoffe. *See* **Pubetz**, Anton.

——— Wollengarn-Färberei. *See* **Richter**, E., and **Braun**, W.

"Dyer" [*pseud.*]. Intensity coils: how made and how used. 8th ed. 8°. *London*, 1875. pp. 63.

Dyer, D. The eclectic family physician; a scientific system of medicine on vegetable principles. 18°. *Hallowell*, 1855.

Dyer, Thomas H. Pompeii, its history, buildings and antiquities: an account of the destruction of the city, description of the remains and recent excavations; also an itinerary for visitors. 2d ed. 12°. *London*, 1868. [†]

Dyer and colour maker's companion, containing upwards of two hundred receipts for making colours; together with the scouring process, and directions for preparing, washing-off, and finishing the goods. 12°. *Philadelphia*, 1850.

DYESTUFFS. Der Färber. 4ter Theil. Farbwaarenkunde. *See* **Schrader**, Hermann.

Dyhrenfurth, J. American autodidactic; or, self-teaching system of bookkeeping. 8°. *Chicago*, 1868.

DYNAMICS. Construction of machinery, etc. *See* **Warr**, G. F.

——— Die Lehren der Statik, Dynamik und Hydrostatik. *See* **Newth**, Samuel. **190 Neuer Schauplatz der Künste.**

——— Principles and practice of statics and. *See* **Baker**, T. **Weale's series, No. 97.**

DYNAMITE. Dynamit, ihre Bedeutung und Gefährlichkeit. *See* **Franzl**, Isidor.

——— Spreng- und Zündversuche mit Dynamit. *See* **Lauer**, Johann.

DYNAMOMETER. Das Horizontal-Dynamometer. *See* **Schönemann**, T.

Digitized by Google

DYNAMOMETER. Indicator and dynamometer applied to the steam engine. *See* **Main**, T. J., and **Brown**, T.

Dyson. The home book. *See* **Valentine**, R.

DYSPEPSIA. A reformed dyspeptic. *See* **Story** of a stomach.

Dzierzon, Johann. Encyclopädie der Landwirthschaft; bearbeitet von. *See* **Schnee**, G. H.

Eads, James B. System of naval defences. A report to the secretary of the navy. 4°. *New York*, 1868.

Eagles, John. The sketcher. 8°. *Edinburgh and London*, 1856.

Eames, John. Philosophical transactions, abridged by. *See* LONDON. **Royal** society.

EAR, A treatise on. *See* **Bryan**, James.

Eardley-Wilmot, Arthur Parry. A complete and universal dictionary of signals; with a list of the royal navy, the Indian navy, the different yacht clubs; and the names of all merchant vessels registered at Lloyds, with their tonnage, corrected to 1850. 2d ed. 18°. *London*, 1851.

EARTH, The age and life of our. *See* **Mansil**, Richard.

——— and man, The. *See* **Guyot**, Arnold.

——— The antiquity of the. *See* **Douglas**, J.

——— Die Bestimmung der Gestalt und Grösse der Erde. *See* **Gerlach**, Friedrich Wilhelm von.

——— closets. **Abridgments English Patents, No. 63.**

——— Life on the earth, its origin and succession. *See* **Phillips**, J.

——— Natural history of. *See* **Woodward**, John.

——— A new theory of the. *See* **Whiston**, William.

——— Original state and formation of the. *See* **Whitehurst**, J.

——— The pre-Adamite. *See* **Harris**, J.

——— Studies of the. *See* **Coues**, S. E.

——— Theory of the. *See* **Hutton**, James.

EARTHENWARE. Koloriren und Dekoriren von Porzellan, Steingut, etc. *See* **Strele**, Karl. **146 Neuer Schauplatz der Künste.**

——— Die Kunst Töpferwaare anzufertigen. *See* **Bastenaire-Daudenart. 88 Neuer Schauplatz der Künste.**

EARTHENWARE. Manuel du porcelainier, du faïencier, et du potier de terre. *See* **Boyer. 35 Manuels Roret.**

EARTHQUAKE, Great Neapolitan, of 1857. *See* **Mallet**, Robert.

EARTHQUAKES and volcanoes. *See* **General** theory and phenomena of earthquakes, etc.

——— ——— *See* **Science lectures for the people, series 6.**

——— A letter concerning. *See* **Flamsteed**, J.

EARTHWORK mensuration. *See* **Howard**, Conway R.

EARTHWORM and common housefly. *See* **Samuelson**, James, and **Hicks**, J. Braxton.

Eassii, P. B. Wood and its uses; a handbook for the use of contractors, builders, architects, engineers, timber merchants, etc.; with information for drawing up designs and estimates. *Illus.* 8°. *Gloucester*, 1874.

EAST Indian archipelago, Travels in the. *See* **Bickmore**, Albert S.

Easter, John D. Physical technics; transl. by. *See* **Frick**, J.

Eastlake, Charles L. Hints on household taste in furniture, upholstery, etc. Ed. by C. C. Perkins. 1st Amer. from rev. Lond. ed. 8°. *Boston*, 1872.

——— Materials for a history of oil painting. 8°. *London*, 1847.

Easton, Alexander. A practical treatise on horse-power railways; their location, construction and management; general plans and rules for their organization and operation; with examinations as to their comparative advantages over the omnibus system. 8°. *Philadelphia*, 1859.

Easton, Charles. Opinion of Mr. Justice Woodbury in the case of Wilson vs. Rousseau and Easton. *See* **Woodbury**, L.

Easton, Thomas S. Invention for preventing explosions of steam boilers. *See* UNITED STATES. **Navy** department.

Eastwood, B. A complete manual for the cultivation of the cranberry. 12°. *New York*, 1856.

EATING, The philosophy of. *See* **Bellows**, Albert J.

Eaton, Amos, and **Wright,** John. North American botany; comprising native and common plants north of Mexico. Genera arranged, etc. 8th ed. 8°. *Troy, N. Y.*, 1840.

Digitized by Google

Eaton, Orsamus, et al. Arguments of W. W. Hubbell: Winans vs. Eaton et al. for infringement. *See* **Hubbell,** W. W.

——— Argument of W. Whiting: Winans vs. Eaton et al. for infringement. *See* **Whiting,** W.

——— Winans vs. Eaton et al. Motion for injunction. *See* **Winans,** R.

Edelmen. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

ECCLESIASTICAL art. Kirchliche Kunst von Hans Petching. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 23.**

——— structures. *See* **Series** of executed examples, etc.

Écho de la littérature et des beaux-arts dans les deux mondes. Revue des ouvrages nouveaux; chronique et nouvelles littéraires; bulletin des beaux-arts; compte rendus et chronique des théâtres; biographie, bibliographie littéraire. 8°. *Paris,* 1841–42.

——— (L') du monde savant. 5e–10e année, 1838–43. fol. *Paris,* 1838–43.

Eckfeldt, Jacob R., and **Du Bois,** William E. A manual of gold and silver coins of all nations, struck within the past century; with treatises on bullion, plate, counterfeit coins, specific gravity of precious metals, etc. *Illus.* sm. 4°. *Philadelphia,* 1842.

——— ——— New varieties of gold and silver coins, counterfeit coins, and bullion, with mint values. 8°. *New York,* 1851.

Eckstein, G. F. A practical treatise on chimneys; remarks on stoves, the consumption of smoke and coal, ventilation, etc. 8°. *London,* 1852.

ECLECTIC family physician, The. *See* **Dyer,** D.

ECLIPSE of the sun. Aug., 1869. *See* **Sands,** B. F.

——— Total eclipse of the sun, Sept. 7, 1858, observed near Olmus, Peru, by J. M. Gilliss. **Smiths'n contrib., v. 2.**

Ede, George. Management of steel. *See* **Campin,** F.

——— The management of steel; forging, hardening, tempering, annealing, shrinking, and expansion: also the case-hardening of iron. 12°. *New York,* 1864. pp. 41. Same, 4th ed., 1867.

Edelman, George W. The bullion dealer's guide. 8°. *New York,* 1868.

Edelman, George W. Rules for converting sterling into currency, and currency into sterling, from par to 12¼ per cent, increasing by one fourth of one per cent. 8°. *Philadelphia,* 1849.

EDEN, Journey to the land of. *See* **Byrd,** W.

Edger, Henry. The positivist calendar, or transitional system of public commemoration, instituted by Augustus Comte, etc. 8°. *New York,* 1856.

EDGEWOOD, My farm of. *See* **Mitchell,** Donald G.

EDINBURGH encyclopædia, The. *See* **Brewster,** David.

——— journal of science. *See* **Brewster,** David.

——— pharmacopœia: transl. of the new, by J. B. Nevins. *See* LONDON pharmacopœia.

——— new philosophical journal (The), exhibiting a view of the progressive improvements and discoveries in the sciences and the arts. Ed. by Thomas Anderson, Sir William Jardine, John Hutton Balfour and Henry D. Rogers. 76 v. 1st series, v. 1–57; new series, v. 1–19. 8°. *Edinburgh,* 1826–64.

——— philosophical journal; exhibiting a view of the progress of discovery in natural philosophy, chemistry, natural history, comparative anatomy, practical mechanics, geography, navigation, statistics, and the fine and useful arts. Quarterly. v. 1–16. 8°. *Edinburgh,* 1819–26.

——— review (The), or critical journal. American ed. v. 91–144. 8°. *New York,* 1850–76——.

EDUCATION. Allgemeine Bildungsmittel. Volksbibliotheken. Vereinswesen. Arbeiterwohnungen. Sparcassewesen. Von Carl Th. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— The bureau of. Circulars of information. *See* UNITED STATES. **Interior** department.

——— Report of the commissioner. *See* UNITED STATES. **Interior** department.

——— The first round in the ladder of. *See* **Brown,** James.

——— Hints to mechanics on self education. *See* **Claxton,** T.

——— in England. 20th report of the science and art department of the committee of council on education. *See* GREAT BRITAIN

Digitized by Google

EDUCATION in Europe. *See* **Bache**, Alex. Dallas.

——— in Lower Canada. Extracts from the statistical tables of primary schools. *See* CANADA.

——— ——— Report of the superintendent of education for 1850–56. *See* CANADA.

——— in Upper Canada. Report of the schools, for 1855, by E. Ryerson. *See* CANADA.

——— Instruction publique. *See* **Dombasle**, Mathieu de C. J. A.

——— Lectures and reports on. *See* **Mann**, Horace.

——— Means of promoting popular, Report on. By J. R. Treese. *See* UNITED STATES. **State depart. Reports, Paris exp. 1867. v. 5.**

——— National education in Europe. *See* **Barnard**, Henry.

——— Reformatory. *See* **Barnard**, Henry.

——— Report on. By J. W. Hoyt. *See* UNITED STATES. **State depart. Reports, Paris exp. 1867. v. 6.**

——— Report on. By J. W. Hoyt. *See* UNITED STATES. **State depart. Reports, Vienna exhib. 1873. v. 2.**

——— Report on. By E. Seguin. *See* UNITED STATES. **State depart. Reports, Vienna exhib. 1873. v. 2.**

Edwards, Charles. Pleasantries about the courts and lawyers of the state of New York. 8°. *New York*, 1867. [?]

Edwards, Edward. Libraries and founders of libraries. 8°. *London*, 1864.

——— Memoirs of libraries: including a handbook of library economy. 2 v. 8°. *London*, 1859.

Edwards, Frederick, *jun.* The economical use of fuel, and the prevention of smoke in domestic fire-places; with observations on the patent laws. 8°. *London*, 1864.

——— Our domestic fire-places: a treatise on the economical use of fuel, and the prevention of smoke, with observations on the patent laws. 2d ed. 8°. *London*, 1865.

——— Ventilation of dwelling-houses, and the utilization of waste heat from open fire-places. 8°. *London*, 1868.

Edwards, Henri Milne. Commissaire de pisciculture; rapport de. *See* FRANCE.

——— Rapport sur la production et l'emploi du sel en Angleterre. 4°. *Paris*, 1850.

Edwards, Henri Milne. Report on fish breeding, by. *See* **Fry**, W. H.

Edwards, R. Annual directory of Chicago. 8°. *Chicago*, 1872.

Edwards, William C. Operative's protector. 18°. *Philadelphia*, 1850.

EDYSTONE lighthouse, The construction of the. *See* **Smeaton**, J.

EFFECT. *See* **Theory** of effect, etc.

——— and colour, Principles of. *See* **Phillips**, G. F.

Egan, Charles. Law of French and English patents. **Weale's papers on engineering, v. 4.**

Egerton, J. Treatise on photography; transl. by. *See* **Lerebours**, N. P.

EGYPT. Description of the Egyptian court in the Crystal palace. *See* **Jones**, O., and **Bononi**, J. **Crystal palace library, v. 1.**

EGYPTIANS, Ancient. *See* **Wilkinson**, J. Gardner.

Eichler, C. Die Orgel, ihre Beschreibung, Behandlung und Geschichte. *Illus.* obl. 8°. *Suttgart*, 1858. pp. 16.

Eichler, Fr. A. A treatise on the manufacture of liquors, syrups, cordials and bitters, vinegar, cider, wines, punch-essences, etc. 3d ed. 12°. *Philadelphia*, 1869.

Eickemeyer, Franz. Das Massen-Nivellement und dessen praktischer Gebrauch. 8°. *Leipzig*, 1870.

Eight practical treatises on the cultivation of the sugar cane. 8°. *Jamaica*, 1843.

Einbeck, Johannes. Theoretische Untersuchung der Constructionssysteme des Unterbaues von Locomotiven. *Illus.* 8°. *Leipzig*, 1875.

Eisenlohr, Th. Die Orgel; eingeführt von. *See* **Eichler**, C.

Elaboratory laid open (The); or, the secrets of modern chemistry and pharmacy revealed: containing many particulars extremely necessary to be known to all concerned in medicine, as well as to others engaged in the practice of various œconomical arts. 2d ed. with considerable additions, and several emendations. 8°. *London*, 1768.

Elderhorst, William. Detection of poisons; transl. by. *See* **Otto**, F. J.

ELECTIONS. Elezioni politiche, 1865–66. *See* ITALY.

ELECTRIC telegraph. *See* **Pope**, Frank L

Digitized by Google

ELECTRICAL communication on railway trains. *See* **Brae**, Andrew Edmund.
——— magazine (The); conducted by Charles V. Walker. v. 1. July, 1843, to April, 1845. 8°. *London*, 1845.
——— measurement, Elementary treatise on. *See* **Clark**, Latimer.
——— review. *See* **Telegraphic** journal.
Electrician (The); a weekly journal of telegraphy, electricity and applied chemistry. v. 1–6. 4°. *London*, 1862–64.
ELECTRICITY. *See* **Franklin**, Benjamin.
——— The American claim to the induction coil, etc. *See* **Page**, Charles Grafton.
——— and electric telegraph. *See* **Prescott**, G. B.
——— and galvanism, An epitome of. *See* **Epitome.**
——— and magnetism. **Abridgments English Patents, No. 15.**
——— ——— *See* **Deschanel**, A. Privat.
——— ——— *See* **Jenkin**, Fleeming.
——— ——— *See* **Maxwell**, James Clark.
——— Annals of. *See* **Sturgeon**, W.
——— Der Antheil der K. bayerischen Akademie der Wissenschaften an der Entwickelung der Electricitätslehre. *See* MUNICH.
——— Applications de l'électricité. *See* **Du Moncel**, T.
——— Der electrische Doppelhebel. *See* **Czermak**, Johann N.
——— L'éclairage et le chauffage par l'électricité. *See* **Delalot-Sevin.**
——— Electrical rheometry, by A. Secchi. **Smithsonian contrib., v. 3.**
——— L'électricité et les chemins de fer. *See* **Castro**, M. F. De.
——— Electrostatique. *See* **Béron**, P.
——— Elektricität. *See* **Zimmerman**, W. F. A. **Handbuch der Physik, B. 1.**
——— Essay on. *See* **Martin**, B.
——— Experimental researches in. *See* **Faraday**, M.
——— The history and present state of. *See* **Priestly**, Joseph.
——— Hitt's electro-dynamics. *See* **Hitt**, J. D.
——— Lectures on. *See* **Noad**, H. M.
——— Lehre von der Reibungselektricität. *See* **Riess**, P. T.
——— Lessons in, at the Royal institution. *See* **Tyndall**, John.
——— A manual of. *See* **Bakewell**, F. C.

ELECTRICITY. A manual of. *See* **Lardner**, D., and **Walker**, C. V. **Lardner's cabinet cyclopædia, v. 108, 109.**
——— ——— *See* **Noad**, H. M.
——— Manuel de l'électricité atmosphérique. *See* **Murray**, J. **92 Manuels Roret.**
——— Medical applications of. *See* **Channing**, W. F.
——— Medical batteries. *See* **Garratt**, Alfred C.
——— Neue electrische Maschinen. *See* **Reis**, Paul.
——— Oertliche Anwändung der Elektricität. *See* **Duchenne de Boulogne.**
——— or, the etherial fire. *See* **Gale**, T.
——— Proceedings of the London electrical society. *See* **London** electrical society.
——— Rudimentary. *See* **Harris**, W. S.
——— Scientific researches in. *See* **Sturgeon**, W.
——— Système d'éclairage électrique. *See* **Lacassagne**, J., and **Thiers**, R.
——— Theory and practice. *See* **Cavallo**, Tiberius.
——— Theory, sources, and applications. *See* **Sprague**, John T.
——— Traité de l'électricité. *See* **Becquerel**, A. C. and A. E.
——— ——— *See* **Gavarret**, L. D. J.
——— Treatise on. *See* **La Rive**, A. de.
——— ——— by P. M. Roget. *See* LONDON. **Society of useful knowledge, v. 2.**
ELECTRO-ballistic machines. *See* **Benet**, S. V.
ELECTRO-chemistry. Éléments d'électrochimie. *See* **Becquerel**, A. C.
——— Die Operationen der Electro-Chemie. *See* **Brandely**, A. **174 Neuer Schauplatz der Künste.**
——— Scientific researches in. *See* **Sturgeon**, W.
ELECTRO-magnetic telegraph. *See* **Turnbull**, Laurence.
ELECTRO-magnetism. Der Elektromagnetismus. *See* **Dub**, J.
——— Der Elektromagnetismus insbesondere als Triebkraft. *See* **Roloff**, J. F.
——— Étude de l'électromagnétisme. *See* **Du Moncel**, T.
——— Die Magnet-Electricität als motorische Kraft. *See* **Harzer**, F. **175 Neuer Schauplatz der Künste.**
——— Scientific researches in. *See* **Sturgeon**, W.

Digitized by Google

ELECTRO-magnetism, Treatise on, by P. M. Roget. *See* LONDON. **Society of useful knowledge, v. 2**

ELECTRO-magnets. La forme et la nature des électro-aimants. *See* **Hughes**, D. E.

ELECTRO-metallurgy. Application to tion to manufacturing processes. *See* **Byrne**, O. **Metal-worker's assistant.**

——— Elements of. *See* **Smee**, A.

——— Manual of. *See* **Napier**, James.

——— ——— *See* **Shaw**, G.

——— practically treated. *See* **Watt**, A.

——— Theory of electro-deposition. *See* **Gore**, G., **Sparling**, M., and **Scoffern**, J. **Orr's circle of the sciences, v. 7.**

ELECTROPATHY. Electropathic guide. *See* **Paige**, A.

ELECTRO-physiology. *See* **Huff**, Gershom.

——— and therapeutics. *See* **Morgan**, Charles E.

——— Elettro-fisiologia. *See* **Cima**, Antonio.

ELECTRO-plating. Repertorium der Galvanostegie. *See* **Martin**, A.

ELECTRO-therapeutics. Apparate für Electrotherapie, von Moriz Benedikt. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

——— Elektrotherapie. *See* **Benedikt**, Moriz.

ELECTROTYPE manipulation. *See* **Walker**, C. V.

——— Process of. *See* **Humphrey**, S. D.

——— Repertorium der Galvanoplastik. *See* **Martin**, A.

ELECTROTYPING. Darstellung der Kupferfiguren durch die Galvanoplastik. *See* **Schmied**, C. **165 Neuer Schauplatz der Künste.**

——— Die Galvanoplastik. *See* **Walker**, C. **123 Neuer Schauplatz der Künste.**

——— Manipulations hydroplastiques. *See* **Roseleur**, A.

Elegant arts for ladies. *Illus.* 8°. *London, n. d.*

Elementary German primer for learning to read the language. 24°. *New York*, 1847.

Elements and practice of rigging and seamanship. *Illus.* v. 2. 4°. *London*, 1794.

ELEVATIONS west of the Mis-issippi river, List of. By Henry Gannett. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. Misc. pubs., No. 1.**

Eliot, Charles W., and **Storer,** Frank H. A compendious manual of qualitative chemical analysis. 8°. *Boston*, 1868. [Proof-sheets.]

Ellerbrock, Ignatz Joseph. Die holländische Rindviehzucht und Milchwirthschaft. *Illus.* 8°. *Braunschweig*, 1853.

Ellet, Charles. Physical geography of the United States. **Smiths'n contrib., v. 2.**

Elliot, George H. Report of a tour of inspection of European light-house establishments, made in 1873. 8°. *Washington*, 1874.

Elliot, Jonathan. The American diplomatic code, embracing a collection of treaties and conventions between the United States and foreign powers; from 1778 to 1834. With an abstract of important judicial decisions on points connected with our foreign relations: also a summary of the law of nations. 2 v. 8°. *Washington*, 1834. [†]

——— Funding system of the United States and Great Britain, prepared by. *See* UNITED STATES.

Elliot, S. Alfred. A list of patents granted by the United States, alphabetically arranged from 1790 to 1828, etc. 8°. *Washington*, 1828. [2 copies.]

Elliott, E. B. Commission for revision of revenue system. *See* UNITED STATES. **Treasury** department.

——— On the military statistics of the United States of America. 4°. *Berlin*, 1863. pp. 44.

Elliott, Stephen. A sketch of the botany of South Carolina and Georgia. 2 v. 8°. *Charleston, S. C.*, 1821.

Ellis, *Mrs.* Housekeeping made easy. 12°. *New York*, 1850.

Ellis, Benjamin. The medical formulary: a collection of prescriptions derived from the writings and practice of many of the most eminent physicians in America and Europe, etc. 5th ed. 8°. *Philadelphia*, 1838. Also 10th ed., 1854. 12th ed., 1868.

Ellis, E. R. Homœopathic family guide. 24°. *Detroit*, 1868.

Ellis, George E. Memoirs of Sir Benjamin Thompson, Count Rumford, with notices of his daughter. roy. 8°. *Philadelphia, n. d.*

Digitized by Google

Ellis, M. H. The ambrotype and photographic instructor; or, photography on glass and paper. 12°. *Philadelphia*, 1856.

Ellis, Robert. On the safe abolition of pain, in labour and surgical operations, by anæsthesia with mixed vapours. 16°. *London*, 1866.

Ellison, Thomas. A hand-book of the cotton-trade; or a glance at the past history, present condition, and future prospects of the cotton commerce of the world. 8°. *London*, 1858.

Ellsworth, Henry L. Digest of patents, issued by the United States, 1790–1839. *See* UNITED STATES. **Interior dept. Patent office.**

Ellsworth, Henry W. The American swine-breeder; a treatise on the selection, rearing and fattening of swine. 18°. *Boston*, 1840.

ELOCUTION and oratory. *See* **Griffith,** Allen A.

—— A system of practical. *See* **Weaver,** J.

Elsner, Fritz. Grundriss der pharmaceutischen Chemie. 16°. *Berlin*, 1869.

Elsner, J. G. Die Bildung des Landwirthes in der weitesten Bedeutung. am. 8°. *Stuttgart und Tübingen*, 1838.

—— Die deutsche Landwirthschaft nach ihrem jetzigen Stande. Ers er Theil. 8°. *Stuttgart und Tübingen*, 1830.

—— Das Geheimniss der wohlfeilen Erzeugung und günstigsten Ausbildung edler Wolle. 8°. *Stuttgart und Tübingen*, 1845.

Elsner, L. Die chemisch-technischen Mittheilungen der Jahre 1846–1876. 25 Hefte. 8°. *Berlin*, 1846–76——.

—— Die galvanische Vergoldung und Versilberung. 12°. *Leipsig*, 1856.

—— Sach-Register zu den bisher erschienenen dreizehn Heften der chemisch-technischen Mittheilungen der neuesten Zeit, etc., die Jahre 1846 bis 1864 enthaltend. 8°. *Berlin*, 1865. Same, 1846–71. 8°. *Berlin*, 1873.

Elvans, John R., and co., dealers in metals and hardware, Catalogue and price list of. 8°. *Washington*, 1867.

Elwood, James L. Grain tables. 12°. *Buffalo*, 1850.

Elwyn, Alfred. Glossary of supposed Americanisms. 12°. *Philadelphia*, 1859.

EMBALMING, History of. *See* **Gannal,** J. N.

EMBANKING lands from the sea. *See* **Wiggins,** J. **Weale's series, Nos. 80°, 81°.**

EMBELLISHMENT of glass, wall and metal surfaces. Die Verschönerungskunst. *See* **Schreiber,** E. **242 Neuer Schauplatz der Künste.**

—— of wood, horn, ivory, etc. Das Beizen, Schleifen und Poliren, die Verschönerung, etc. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

EMBLEMS. La science des emblèmes. *See* **Iconologie.**

EMBROIDERER'S book of design. *See* **Delamotte,** F.

EMBROIDERY. Abridgments English Patents, No. 2.

—— Art du brodeur, par de Saint-Aubin. PARIS. **Acad. des sc., arts et métiers, v. 14 and 31.**

—— Book of. *See* **Lady's library.**

—— Book of knitted and netted. *See* **Lady's library.**

—— La brodeuse illustrée. *See* **Brodeuse illustrée (La).**

—— Directions for working. *See* **Gaugain,** *Mrs.* J.

—— Stickerei und Spitzen. Von Ferd. Stamm. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

EMBRYOLOGY, Elements of. *See* **Forster,** M., and **Balfour,** F. M.

EMDEN. Naturforschende Gesellschaft. Der Barometerstand Ostfrieslands. Kleine Schriften, VI. *See* **Prestel,** M. A. F.

—— —— Festschrift. 4°. *Emden*, 1865.

—— —— Gewitter des Jahres 1855. Kleine Schriften, IV. *See* **Prestel,** M. A. F.

—— —— Jahresberichte, 40ter–60ter, 1854–76. 22 B. 8°. *Emden*, 1854–76——.

—— —— Klima von Ostfriesland. Kleine Schriften, V. *See* **Prestel,** M. A. F.

—— —— Meteorologische Beobachtungen zu Clausthal. Kleine Schriften, VII. *See* **Schoof,** C. L.

—— —— Die Regenverhältnisse des Königreichs Hannover, etc. 4°. *Emden*, 1864. pp. 56.

—— —— System der Winde über dem atlantischen Ocean. Kleine Schriften, X. *See* **Prestel,** M. A. F.

—— —— Die Temperatur-Verhältnisse, etc. Kleine Schriften, XV. *See* **Prestel,** M. A. F.

Digitized by Google

EMDEN. Naturforschende Gesellschaft. Temperatur von Emden. *See* **Prestel**, M. A. F.

——— ——— Verbreitung des Moorranchs vom 20. bis 26. Mai 1860, etc. Kleine Schriften, VIII. *See* **Prestel**, M. A. F.

——— ——— Die Winde in Beziehung zur Salubrität, etc. Kleine Schriften, XVI. 8°. *Emden*, 1872.

——— ——— Witterungs-Beobachtungen zu Emden. Kleine Schriften, IX. *See* **Prestel**, M. A. F.

Emerson, William. The elements of optics. 4 books. Book I. Simple optics, or direct vision. II. Catoptrics, or reflected vision. III. Dioptrics, or refracted vision. IV. The construction of optical instruments. 8°. *London*, 1768.

——— Mechanics, or the doctrine of motion. 8°. *London*, 1769.

Emerson's magazine and Putnam's monthly. *See* **Putnam**.

Emery. Interference between the application of Emery and Johnson, and the patent granted to J. E. A. Gibbs. Argument of counsel. *See* **Pollak**, A.

EMIGRATION of British birds. *See* **Thousand** notable things.

Emmerich, A. The culture of forests, with an appendix in which the state of the royal forests is considered and a system proposed for their improvement. 8°. *London*, 1789.

Emmerson, Ralph, et al. McCormick vs. Talcott et al. Appeal. *See* **McCormick**, C. H.

Emmet, Thomas Addis. Vesico vaginal fistula. 8°. *New York*, 1868.

Emmons, George F. The navy of the United States, from the commencement, 1775, to 1853, with a brief history of each vessel's service and fate. 4°. *Washington*, 1853.

EMOTIONS. The expression of emotions in man and animals. *See* **Darwin**, Charles.

Emporium of arts and sciences; by John Redman Coxe and Thomas Cooper. 5 v. 8°. *Philadelphia*, 1812-14.

Emy, A. R. Traité de l'art de la charpenterie. T. 1-2, 4°. Atlas, folio. *Paris*, 1837-41.

ENAMEL photography. Emailphotographie und Phototypie. *See* **Martin**, A. **279 Neuer Schauplatz der Künste.**

ENAMELLING, Art of. *See* **Gessert**, M. A. **Weale's series, No. 40.**

ENAMELLING. Emailliren der Kochgeschirre. *See* **Erbe**, C.

——— Koloriren und Dekoriren, durch Emailfarben, etc. *See* **Martin**, A. **279 Neuer Schauplatz der Künste.**

ENCHIRIDION; or, a hand for the one-handed. *See* **De Renzy**, George Webb.

ENCYCLOPÆDIA, The. *See* **Rees**, Abraham.

——— Allgemeine Encyklopädie der Wissenschaften und Künste. *See* **Ersch**, J. S., and **Gruber**, J. G.

——— The American annual. *See* **American.**

——— Americana. Ed. by Francis Lieber, assisted by E. Wigglesworth and T. G. Bradford. v. 1-13. [Supplementary vol. 14, ed. by Henry Vethake.] 8°. *Philadelphia*, 1848.

——— Appleton's cyclopædia of biography. *See* **Hawks**, Francis L.

——— Britannica (The); or dictionary of arts, sciences, and general literature. 7th ed. v. 1-21. 4 v. plates, 1 v. index. 4°. *Edinburgh*, 1842. 8th ed. *Illus.* v. 1-21. 4°. *Edinburgh*, 1853-60. 9th ed. v. 1-6——. *Illus.* 4°. *Boston*, 1875-77——.

——— ——— Die englischen Pendeluhren, etc. *Illus.* 8°. *Weimar*, 1856. **9 Neuer Schauplatz der Künste.**

——— The British, etc. *See* **Nicholson**, W.

——— Chambers'. *See* **Chambers**, William and Robert.

——— The domestic. *See* **Willich**, A. F. M.

——— The Edinburgh. *See* **Brewster**, David.

——— Encyclopädie der Naturwissenschaften in ihrer Anwendung auf die Landwirthschaft. *See* **Schleider**, M. J., and **Schmid**, E. E.

——— Encyclopédie technologique. *See* **Laboulaye**, C. L.

——— Engineer and mechanic's. *See* **Herbert**, L.

——— The English. *See* **Knight**, Charles.

——— The farmers and planters'. *See* **Johnson**, Cuthbert W.

——— General index to Appleton's annual cyclopædia. *See* **American** annual.

——— The globe. *See* **Ross**, John M.

——— Graud, illustrated. *See* **Frost**, John.

——— Iconographic. *See* **Heck**, J. G.

——— Illustrated. *See* **Practical** magazine.

——— The imperial cyclopædia of machinery. *See* **Johnson**, William.

Digitized by Google

ENCYCLOPÆDIA Metropolitana. Ed. by E. Smedley and H. J. Rose. 25 v. with index. 4°. *London*, 1845.

——— The modern. *See* **Burrowes**, Aymas Deane.

——— New American cyclopedia. *See* **Ripley**, G., and **Dana**, C. A.

——— New and complete American, from the Encyclopædia Perthensis. *See* **New** and complete American encyclopædia.

——— of agriculture. *See* **Loudon**, J. C.

——— of Biblical literature. *See* **McClintock**, John.

——— of chemistry. *See* **Booth**, James C.

——— of cottage, farm, and villa architecture and furniture. *See* **Loudon**, J. C.

——— of domestic economy. *See* **Webster**, Thomas.

——— of practical receipts and processes. *See* **Dick**, William B.

——— of useful arts. *See* **Tomlinson**, Charles.

——— or, dictionary of arts, sciences, and miscellaneous literature. American ed. 3 v. 4°. *Philadelphia*, 1818.

——— The self-aid cyclopædia. *See* **Burn**, Robert Scott.

——— Technologische Encyklopädie. *See* **Prechtl**, Johann Joseph.

——— Universal-Lexikon. *See* **Pierer**, H. A.

——— Zell's popular. *See* **Colange**, L.

Encyclopädische Zeitschrift des Gewerbewesens. Jahrg. 3–8. 1843–48. 8 B. 8°. *Prag*, 1843–48.

Encyclopédie méthodique. Arts et métiers mécaniques. T. 1–8. 4°. *Paris*, 1782–91.

——— moderne. *See* **Courtin**, E. M.

——— ou dictionnaire raisonné des sciences, des arts et des métiers, mis en ordre et publié par Diderot; et quant à la partie mathématique, par D'Alembert. Texte, T. 1–17; planches, T. 1–11. Supplément, Texte, T. 1–4. Planches, T. 1. Tables, T. 1–2. fol. *Paris et Amsterdam*, 1757–77.

——— populaire; ou les sciences, les arts et les métiers, mis à la portée de toutes les classes. 20 v. 18°. *Paris*, 1828–29.

CONTENTS.

v. 1. Art de l'ornemaniste.
v. 2. Art de la peinture en bâtiments par Doublette-Desbois.
v. 3. Art du vitrier par Doublette-Desbois.
v. 4. Art de fabriquer les savons par Dussard.
v. 5. Histoire naturelle des abeilles par Féburier.
v. 6. Traité des alimens par A. Gautier.

Encyclopédie populaire—Continued.

v. 7. Manuel du marchand papetier.
v. 8. Art de la conservation des substances alimentaires par E. Martin.
v. 9. Art de dégraisser par E. Martin.
v. 10. Art du maçon par E. Martin.
v. 11. Art de préparer la chaux, etc., par E. Martin.
v. 12. Art de la teinture de la soie, etc., par E. Martin.
v. 13. Chimie du teinturier par E. Martin.
v. 14. Art de la réglure par A. B. Meguin.
v. 15. Art de fabriquer la chandelle par Michel.
v. 16. Le fumiste, 2e éd., par E. Pelouze.
v. 17. Art de construire les fourneaux d'usines par E. Pelouze.
v. 18. Art de fabriquer en pierre factice, 2e éd., par E. Pelouze.
v. 19. La laiterie, 2e éd., par R. J. L.
v. 20. Manuel pour l'éducation des vers à soie par J. M. M. Rédarès.

Endegeest, Gevers d'. Du desséchement du lac du Harlem. 2 parts, 1843 and 1853. 8°. *La Haye et Amsterdam*, 1849–53.

Endlicher, Stephano. Synopsis coniferarum. 8°. *Sangalli*, 1847.

Enfield, Edward. Indian corn; its value, culture and uses. 12°. *New York*, 1866.

Engel. Compte-rendu général des travaux du congrès international de statistique dans ses séances tenues, à Bruxelles, 1853; Paris, 1855; Vienne, 1857; et Londres, 1860. Sous la direction de. 4°. *Berlin*, 1863.

Engel, Carl. Musical instruments. 8°. *New York*, 1876. **South Kensington museum, Art and science handbooks, No. 5.**

Engel, Friedrich. Handbuch des gesammten landwirthschaftlichen Bauwesens, mit Einschluss der Gebäude für landwirthschaftliche Gewerbe. *Illus.* B. 1–2. 8°. Plates ob. 4°. *Wriesen a. O.*, 1852.

Engelbach, Th. Jahresbericht über die Fortschritte der Chemie. *See* **Liebig**, J. v., and **Kopp**, H.

Engelbreit, Karl. Die Instrumente der höheren und niederen Geodäsie und der Hydrometrie. 26 Blätter mit erläuterndem Texte. 18°. pl. fol. *Nürnberg*, 1852.

Engelmann, Wilhelm. Bibliotheca mechanico-technologica, oder Verzeichniss der in älterer und neuerer Zeit, bis zur Mitte des Jahres 1843, in Deutschland erschienenen Bücher über alle Theile der mechanischen und technischen Künste und Gewerbe, etc. 8°. *Leipzig*, 1844. Also ed. 1850.

Digitized by Google

Engelmann, Wilhelm. Bibliotheca medico-chirurgica et anatomico-physiologica. Alphabetisches Verzeichniss der medizinischen, chirurgischen, geburtshülflichen, anatomischen und physiologischen Bücher, welche vom Jahre 1750 bis zu Ende des Jahres 1847 in Deutschland erschienen sind. 8°. *Leipzig*, 1848.

—— Bibliotheca œconomica, oder Verzeichniss der in älterer und neuerer Zeit bis zur Mitte des Jahres 1840 in Deutschland und den angränzenden Ländern erschienenen Bücher über die Haus- und Landwirthschaft und deren einzelne Zweige. 8°. *Leipzig*, 1841.

Engineer, The. v. 1-42. 1856-76. [Also 7 vols. of advertisements.] fol. *London*, 1856-76——.

—— and machinist's assistant. *See* **Scott,** D.

—— and machinist's drawing-book. *See* **Le Blanc** and **Armengaud.**

—— and mechanic's companion. *See* **Hogg,** Joseph.

—— Dictionnaire de l'ingénieur. *See* **Belidor,** B. F. de.

—— Handbook for the. *See* **Byrne,** O.

—— The practical railway. *See* **Dempsey,** G. Drysdale.

ENGINEERING, American locomotive. *See* **Weissenborn,** G.

—— and architecture. The mechanical principles of. *See* **Moseley,** Henry.

—— and public works, Report on. By W. P. Blake. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 4.**

—— Architecten- und Ingenieur-Verein, Hannover. *See* HANOVER.

—— Civil, and machinery, by H. Heusman. *See* **Lectures** on the results of the exhibition.

—— —— Civil engineer and architect's journal. *See* **Civil** engineer.

—— —— Der Civilingenieur. *See* **Civilingenieur.**

—— —— An elementary course of. *See* **Mahan,** D. H.

—— —— Encyclopædia of. *See* **Cresy,** E.

—— —— Illustrated glossary of. *See* **Brees,** S. C.

—— —— Manual of. *See* **Rankine,** W. J. M.

ENGINEERING, Civil, Report on. By W. Watson. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 3.**

—— —— Reports of the late J. Smeaton. *See* **Smeaton,** J.

—— —— Rudiments of. *See* **Law,** H., and **Burnell,** G. R. **Weale's series, Nos. 13, 14, 15, 15*.**

—— —— Sketch of, in North America. *See* **Stevenson,** D.

—— —— Der Strassen-Bau. *See* **Lixante,** A **189 Neuer Schauplatz der Künste.**

—— —— Transactions of the institution of civil engineers. *See* LONDON. **Institution** of civil engineers.

—— Bridges, viaducts, and aqueducts. **Abridgments English Patents, No. 36.**

—— Contractor's book of drawings of tools, etc., used in constructing railroads, etc. *See* **Cole,** G.

—— Cyclopædia of. *See* **Tomlinson,** C.

—— dictionary. **Nicholson,** P.

—— Dictionary of. *See* **Appleton,** D.

—— Dictionary of terms used in. *See* **Weale's series, Nos. 36-39.**

—— Elements of modern. *See* **Baker,** T. **Weale's series, No. 93.**

—— Elements of practical construction. *See* **Downing,** Samuel.

—— facts and figures. *See* **Brown,** Andrew Betts.

—— field-notes. *See* **Castle,** H. J.

—— French and English vocabulary of technical terms. *See* **Flachat,** E., and **Petiet,** J. **Guide** to the locomotive engine.

—— Hochbau-Constructionen in Eisen, etc. *See* **Klasen,** Ludwig.

—— Hydraulic, Report on. By C. Davis. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 3.**

—— —— Rudiments of. *See* **Burnell,** G. R. **Weale's series, No. 120.**

—— —— Rudiments of, by G. R. Burnell. *See* **Law,** H. **Civil engineering, v 3.**

—— —— Vorlegeblätter zur Wasserbaukunde. *See* **Bauernfeind,** Carl Maximilian.

—— Ingenieur-Kalender. *See* **Stühlen,** P.

—— Lehrbuch der Ingenieur-Mechanik. *See* **Weisbach,** J.

Digitized by Google

ENGINEERING. Literatur des Bau- und Ingenieurwesens, etc. *See* Gerold & co.

—— Die Literatur des Ingenieur-Wesens. *See* **Malberg,** A.

—— Mechanical principles of. *See* **Moseley,** H.

—— Mechanics of. *See* **Weisbach,** Julius.

—— —— *See* **Whewell,** W.

—— Modern marine. *See* **Burgh,** N. P.

—— Papers on. *See* **Weale,** J.

—— Papers on practical. *See* UNITED STATES. **War** department.

—— Practice of engineering field work. *See* **Haskoll,** W. D.

—— precedents for steam machinery. *See* **Isherwood,** B. F.

—— Professional papers of the corps of royal engineers. *See* LONDON. **Corps** of royal engineers.

—— Progress of modern. *See* **Humber,** W.

—— Roads and ways. **Abridgments English Patents, No. 35.**

—— Rules and tables relating to. *See* **Rankine,** William John Macquorn.

—— Sanitary. *See* **Latham,** Baldwin.

—— Spons' dictionary of. *See* **Spon's** dictionary.

—— Strength of materials used in. *See* **Whildin,** J. K.

—— Treatise on American. *See* **Mone,** F.

—— Uittreksels uit vreemde tijdschriften, ten dienste der leden van het Koninklijk instituut van ingenieurs. 1848-54. *See* HAGUE.

—— Uittreksels uit vreemde tijdschriften, voor de leden van het Koninklijk instituut van ingenieurs. *See* HAGUE.

—— Verhandelingen van het Koninklijk instituut van ingenieurs. *See* HAGUE.

ENGINEER'S and contractor's pocket-book for the years 1852-53. 8°. *London.*

—— assistant. *See* **Templeton,** William.

—— Corps of royal. *See* LONDON.

—— encyclopædia. *See* **Hebert,** L.

—— handbook, The. *See* **Lowndes,** Charles S.

—— in Scotland. *See* GLASGOW.

—— Institution of mechanical. *See* BIRMINGHAM. **Institution** of mechanical engineers.

—— Lives of the. *See* **Smiles,** S.

—— pocket book. *See* **Haswell,** C. H.

—— Useful information for. *See* **Fairbairn,** W.

ENGINES. Air, gas, and other motive power engines. **Abridgments English Patents, No. 62.**

—— Caloric. Luftexpansions-Maschine. *See* **Redtenbacher,** F.

—— Development of the steam engine. *See* **Ewbank,** T. **Hydraulics.**

—— Dictionary of engine-work. *See* **Appleton,** D.

—— Economy of the marine steam engine. *See* **Gordon,** W.

—— Experiments on locomotive, by Gonin and Le Chatelier. **Weale's papers on engineering, v. 6.**

—— Fire. Die Feuerspritze. *See* **Frick,** J.

—— for the application of other motive powers than steam, by L. Hebert. *See* **Galloway,** E. **Steam** engine.

—— Pneumatic locomotive, by J. Gill. **Weale's papers on engineering, v. 2.**

—— Steam, Anecdotes of. *See* **Stuart,** R.

—— —— First introduction into naval arsenals. **Weale's papers on engineering, v. 2.**

—— —— Die Hochdruckdampfmaschine. *See* **Alban,** E.

—— —— Improvements of, by J. Gill. **Weale's papers on engineering, v. 1.**

—— —— Loss by friction in beam and direct action, by W. Pole. **Weale's papers on engineering, v. 2.**

—— —— of the frigate Kamschatka. **Weale's papers on engineering, v. 1.**

—— —— Woolf's. **Weale's papers on engineering, v. 3.**

—— Treatise on marine. *See* **Murray,** Robert. **Weale's series, Nos. 80, 81.**

—— Treatise on the Cornish pumping-engine, by W. Pole. **Weale's papers on engineering, v. 6.**

ENGLAND. Anglican church architecture. *See* **Barr,** J.

—— British history chronologically arranged. *See* **Wade,** John.

—— The decline of science in England. *See* **Babbage,** C.

—— History of. *See* **Mackintosh,** *Sir* J. **Lardner's cabinet cyclopædia, v. 3-12.**

—— A history of the English railway. *See* **Francis,** J.

—— International copyright between France and England. *See* **Burke,** P.

Digitized by Google

ENGLAND. Die landwirthschaftlichen Geräthe und Maschinen Englands. *See* **Hamm**, Wilhelm.

——— Letters from. *See* **Downing**, A. J. **Rural** essays.

——— Origin and progress of the caoutchouc manufacture in. *See* **Hancock**, T.

——— La production et l'emploi du sel en Angleterre. *See* **Edwards**, H. M.

——— Royal agricultural society, Journal of. *See* **Journal**.

——— The Shrapnel shell in. *See* **Boreman**, *Maj. Gen.*

Engler, Carl. Handbuch der technischen Chemie. Nach A. Payen's Chimie industrielle. 1er B. Anorganische Chemie. 8°. *Stuttgart*, 1872.

English, *Mrs.* The home book. *See* **Valentine**, R.

English and foreign mining glossary; to which is added the smelting terms used in France, Spain and Germany. 12°. *London*, 1852.

——— bee keeper; or, suggestions for the practical management of amateur and cottage apiaries, on scientific principles: with an appendix. 8°. *London*, 1851.

——— catalogue of books published from Jan., 1835, to Jan., 1863. *See* **Low**, S.

——— cookery; containing practical directions for dressing family dinners, and every useful information required by the English cook. 24°. *London*, 1839.

——— cyclopædia, The. *See* **Knight**, Charles.

——— Dutch dictionary. *See* **Bomhoff**, D.

——— French dictionary. *See* **Fleming** and **Tibbins**.

——— ——— dictionary. *See* **Spiers**, A.

——— ——— ——— *See* **Spiers**, A., and **Surenne**.

——— ——— pronouncing dictionary. *See* **Meadows**, F. C.

——— ——— ——— school dictionary. *See* **Spiers**, A.

——— German dictionary. *See* **Adler**, G. J.

——— ——— ——— *See* **Flügel**, J. G.

——— ——— pocket dictionary. *See* **Oehlschläger**, J. C.

——— grammar. *See* **Fowler**, William C.

——— Irish dictionary; containing upwards of eight thousand English words, with their corresponding explanation in Irish. 12°. *Dublin*, 1814.

——— Italian dictionary. *See* **Baretti**, J.

ENGLISH language. An architectural and engineering dictionary, containing nomenclature and derivation of terms, etc. *See* **Nicholson**, Peter.

——— ——— The dean's English. *See* **Moon**, G. Washington.

——— ——— Dictionary of the. *See* **Clarke**, H.

——— ——— Dictionary of the. *See* **Craig**, J.

——— ——— Dictionary of the. *See* **Webster**, N.

——— ——— Dictionary of the. *See* **Worcester**, J. E.

——— ——— Dictionary of Americanisms. *See* **Bartlett**, J. R.

——— ——— Dictionary; history and grammar. *See* **Johnson**, S.

——— ——— Dictionary of the marine. *See* **Falconer**, W.

——— ——— Dictionary of mechanical science, etc. *See* **Jamieson**, A.

——— ——— Dictionary of synonymical terms of the. *See* **Rawson**, J.

——— ——— Englische Aussprache. *See* **Appleton**, Jh. L.

——— ——— Etymological dictionary of the. *See* **Oswald**, John.

——— ——— Explanations of terms used in carpentery, etc. *See* **Nicholson**, Peter. **Mechanic's** companion.

——— ——— Glossary of English words used formerly in senses different from their present. *See* **Trench**, Richard Chenevix.

——— ——— Glossary of scientific terms of the. *See* **Henry**, A.

——— ——— A handbook of the. *See* **Latham**, R. G.

——— ——— A handbook of the engrafted words of the. *See* **Handbook**.

——— ——— Mechanic's pocket dictionary of the. *See* **Grier**, W.

——— ——— A plea for the queen's English. *See* **Alford**, Henry.

——— ——— Pronouncing dictionary and expositor of the. *See* **Walker**, J.

——— ——— Rambles among words. *See* **Swinton**, William.

——— ——— A selection of synonyms. *See* **Whately**, Richard.

——— ——— Studies in English. *See* **Schele de Vere**, M.

——— ——— The study of words. *See* **Trench**, Richard Chenevix.

Digitized by Google

ENGLISH language, A technical dictionary of. *See* **Crabb**, G.

—— —— Thesaurus of English words and phrases. *See* **Roget**, P. M.

—— literature, Bibliographer's manual of *See* **Lowndes**, W. T.

—— —— Critical dictionary of. *See* **Allibone**, S. A.

—— —— A manual of. *See* **Shaw**, Thomas B.

—— mechanic and world of science (The), with which are incorporated, "The mechanic," "Scientific opinion," and "The British and foreign mechanics." v. 17–24. 1873–76. 8 v. fol. *London*, 1873–76——.

—— men of science. *See* **Galton**, Francis.

—— patent law. Amendment act of 1852. 8°. *London*, 1871. pp. 14.

—— patents. *See* GREAT BRITAIN. **Great seal patent office.**

—— people, The origin of. **Science lectures for the people, series 3.**

—— pottery and porcelain; being a concise account of the development of the potter's art in England. *Illus.* 8°. *London*, 1875.

—— Spanish dictionary. *See* **Baretti**, J.

—— —— —— *See* **Neuman**, H., and **Baretti**, J.

—— Technological dictionary. English-German-French. *See* **Franke**, *Prof.*

ENGRAVING. Abridgments English Patents, No. 13.

—— Art of. *See* **Fielding**, T. H.

—— Dessins et gravures. *See* **Senefelder**, Aloys.

—— Graveur- und Guillochir-Arbeiten. Von J. Schwerdtner. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 12.**

—— La gravure, etc., par P. Burty. *See* **Lagrange**, L. **La peinture au salon de 1861.**

—— Lectures on. *See* **Landseer**, John.

—— Lehrbuch der Kupferstecherkunst u. s. w. *See* **Thon**, T. **54 Neuer Schauplatz der Künste.**

—— Manuel du graveur. *See* **Perrot**, A. M. **26 Manuels Roret.**

—— A treatise on wood engraving. *See* **Jackson**, John.

Ennis, Jacob. The origin of the stars and the causes of their motions and their light. 8°. *New York*, 1867.

Enquête sur la boulangerie du département de la Seine; ou recueil de dépositions concernant les commerces du blé, de la farine et du pain, faites en 1859. 4°. *Paris*, 1859.

—— sur la révision de la législation des céréales. 3 v. 4°. *Paris*, 1859.

Enquire within; upon everything. To which is added, "Enquire within upon fancy needlework." 12°. *London*, 1871.

Enslin, Theodor Johann Christian Friedrich. Bibliotheca medico-chirurgica. *See* **Engelmann**, W.

—— Bibliotheca œconomica. Zuerst hrsg. von. *See* **Engelmann**, W.

Enthoffer, J. Topographical drawings methodically arranged and engraved for the use of officers of the army and navy, civil engineers, academies, colleges, and schools of science. 4°. *New York*, 1869.

ENTOMOLOGY. Berliner entomologische Zeitschrift. *See* BERLIN.

—— Bulletin of the United States entomological commission. *See* UNITED STATES. **Interior department.**

—— Classification of insects from embryological data, by L. Agassiz. **Smiths'n contrib., v. 2.**

—— Entomologische Zeitung. *See* STETTIN.

—— Études entomologiques. *See* **Motschulsky**, Victor de.

—— Handelingen der Nederlandsche entomologische vereeniging. *See* HOLLAND.

—— Linnæa entomologica. *See* STETTIN.

—— of North America. *See* **Say**, T.

ENTOZOA. *See* **Cobbold**, T. Spencer.

EOLIPILES, Specimens of ancient. *See* **Ewbank**, T.

Ephemera. Handbook of angling, fly-fishing, trolling, bottom-fishing, and salmon fishing; with the natural history of river fish, and the best modes of catching them. 2d ed. 8°. *London*, 1848.

EPIDEMICS. *See* **Hough**, Lewis S.

—— Notes on. *See* **Anstie**, Francis Edmund.

Epitome of electricity and galvanism; by two gentlemen from Philadelphia. 8°. *Philadelphia*, 1809.

EQUATION tables, Martin's. *See* **Martin**, George W.

EQUILIBRIUM of structures. *See* **Warr**, G. F.

Digitized by Google

Erbe, Christoph. Gründliche Anweisung zum Emailliren und Verzinnen der gegossenen und geschlagenen eisernen Kochgeschirre. 8°. *Quedlinburg und Leipzig,* 1837. pp. 28.

Erdmann, B. A. Oertliche Anwendung der Elektricität. *See* **Duchenne de Boulogne.**

Erdmann, Otto Linné. Journal für praktische Chemie. *See* **Journal.**

ERFURT. K. Akademie gemeinnütziger Wissenschaften zu Erfurt. Jahrbücher. Neue Folge. Heft 6. 8°. *Erfurt,* 1870. [2 copies.]

ERGONOMY; or, industrial science. *See* **Galloway,** Samuel.

Ericsson, John. Comparison between Capt. Coles' and Capt. Ericsson's turrets. *See* **Coles,** C. P.

—— Contributions to the centennial exhibition. *Illus.* 4°. *New York,* 1876.

—— Ericsson's caloric engine. Articles descriptive of the caloric ship Ericsson, and of her trial excursion, Jan. 12, 1853. 8°. *Washington,* 1853. pp. 54.

Erlecke, A. Bibliotheca mathematica. 1r. B. 8°. *Halle,* 1873.

Ernesti, Johann August. Elements of interpretation. Transl. from the Latin, with notes and appendix containing extracts from Morus, Beck, and Keil, by Moses Stuart. 3d ed. 12°. *Andover,* 1827.

Erni, Henri. Coal oil and petroleum; their origin, history, geology, and chemistry; their importance in their bearing upon national industry. 12°. *Philadelphia,* 1865.

—— Mineralogy simplified; transl. by. *See* **Kobell,** F. von.

ERRORS, Enquiries into vulgar and common. *See* **Brown,** *Sir* Thomas.

Ersch, J. S., and **Gruber,** J. G. Allgemeine Encyklopædie der Wissenschaften und Künste in alphabetischer Folge, von genannten Schriftstellern bearbeitet und hrsg. von. 1ste Section, A–G, Theil 1–95——. [Bound in 48 v. "Griechenland" is bound separately in 8 v.] 2te Section, H–N, Theil 1–31——. [Bound in 15 v.] 3te Section, O–Z, Theil 1–23——. [Bound in 12 v.—None of the sections yet complete.] 4°. *Leipzig,* 1818–75——.

Escandon, Pedro. La industria y las bellas artes en la exposicion universal de 1855. Memoria. 8°. *Paris,* 1856.

Escher. Rapporto dal consiglio nazionale nominata per l'affare di Neuchatel. Fatto al consiglio nazionale nella seduta del 15. gennajo 1857. 8°. pp. 8. *n. t. p.*

—— Vortrag der in der Neuenburger Frage niedergesetzten nationalräthlichen Kommission. Gehalten im Nationalrathe am 15. Januar 1857. 8°. pp. 7. *n. t. p.*

Escodeca de Boisse d'. Exposition universelle de 1855. Quelques détails sur les produits de l'imprimerie impériale de France. 8°. *Paris,* 1860. pp. 38.

Esmarch, F. Verbandplatz und Feldlazareth. 8°. *Berlin,* 1868.

Espy, James P. The philosophy of storms. 8°. *Boston,* 1841.

Essai sur les haras; ou, examen méthodique des moyens propres pour établir, diriger et faire prospérer les haras, etc. sm. 4°. *Turin,* 1769.

Essayes of natural experiments made in the "Academie del Cimento," under the protection of the most serene prince, Leopold of Tuscany; written in Italian by the secretary of that academy. Englished by Richard Waller. sm. 4°. *London,* 1684.

Esslinger, M. Traité de chimie; traduit par. *See* **Berzelius,** J. J.

Estadistica de la república de Chile, provincia del Maule. T. 1. 8°. *Santiago,* 1845.

Estell, John T. The American veterinarian. roy. 8°. *Cincinnati,* 1867.

ETCHING and etchers. *See* **Hamerton,** Philip Gilbert.

ETHER. Inhalation of ether in labor. *See* **Channing,** Walter.

ETHERIZATION. *See* **Rice,** Nathan P.

—— *See* **Warren,** John C.

—— A manual of. *See* **Jackson,** Charles T.

ETHICS. Ethic amusement, by Bellamy. *See* **Science,** Miscellaneous.

—— Introduction to. *See* **Jouffroy,** M.

ETHNOLOGY and natural history in the Crystal palace. *See* **Latham,** R. G., and **Forbes,** E. **Crystal palace library, v. 3.**

—— by J. C. Prichard. *See* **Herschel,** *Sir* J. F. W. **Manual** of scientific enquiry.

—— Races of men and their geographical distribution. *See* **Peschel,** Oscar.

Étienne, Ch. Chemin de fer atmosphérique de Saint Germain. 16°. *Paris,* 1846. pp. 24. pl. 2.

ETIQUETTE, Hand-book of. *See* **Martine,** Arthur.

Digitized by Google

Ettling, C. Annual report of the progress of chemistry. *See* **Liebig,** J. v., and **Kopp,** H.

——— Jahresbericht über die Fortschritte der Chemie. *See* **Liebig,** J. v., and **Kopp,** H.

ÉTUDES de la nature. *See* **Saint-Pierre,** Jacques-Henri Bernardin de.

ETYMOLOGY, Exercises on. *See* **Graham,** William.

Enclid, Elements of. *See* **Law,** H. **Weale's series, No. 88.**

——— The first six books of. 8°. *London,* 1853.

Eupel, Johann Christian. Der vollkommene Conditor; ingleichen, erprobte Vorschriften und Recepte zu allen Gattungen der Kunstbäckerei,—ferner zu den beliebsten Arten künstlicher Getränke und Chocoladen. 8°. *Weimar,* 1840. **1 Neuer Schauplatz der Künste.**

Eureka; or the journal of the national association of inventors. v. 1. 4°. *New York,* 1846.

EUROPE. Certain storms in Europe and America, Dec., 1836. By E. Loomis. **Smiths'n contrib., v. 2.**

——— Commercial and financial legislation of Europe and America. *See* **Macgregor,** J.

——— Équipages de ponts militaires en Europe. *See* **Birago.**

——— History of, during the middle ages. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 48-51.**

——— Laws of patent privileges. *See* **Loosey,** C. F.

——— De l'origine de l'imprimerie en Europe. *See* **Bernard,** A. J.

——— Permanent way, and coal burning locomotive boilers of European railways. *See* **Colburn,** Z., and **Holley,** A. L.

EUROPEAN agriculture and economy. *See* **Coleman,** Henry.

——— railway practice. *See* **Holley,** A. L.

Eusebius, Pamphilius. De evangelicâ veritate. Transl. from the Greek to Latin. fol. 1473. (Leonhardus Aurl, printer.)

Evans, A. I. Learned societies of the United Kingdom; with a supplement by. *See* **Hume,** A.

Evans, John. The ancient stone implements, weapons, and ornaments of Great Britain. 8°. *New York,* 1872.

Evans, Oliver. Manuel de l'ingénieur mécanicien, constructeur de machines à vapeur. Traduit de l'anglais par J. Doolittle. 8°. *Paris,* 1821.

Evans, Oliver—Continued.

——— The young mill-wright and miller's guide. 8°. *Octoraro,* 1807.

Evans, Thomas W. Instruments and apparatus of medicine, surgery, hygiene, etc. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Evans, W. J. The sugar planter's manual. 8°. *London,* 1847.

EVAPORATION. Das Verdunsten oder Verdampfen und die Mittel es zu erleichtern. *See* **Leuchs,** J. C.

Eve, Paul F. A collection of remarkable cases in surgery. 8°. *Philadelphia,* 1857.

Evelyn, John. Sculptura; the history and art of chalcography, and engraving in copper. To which is added, a new manner of engraving, or mezzotinto, communicated by his highness, Prince Rupert, to the author of this treatise. 2d ed 12°. *London,* 1755.

——— Silva, or a discourse of forest trees, and the propagation of timber; in two books—also Terra, or an essay on earth—also Pomona, an appendix on fruit-trees; also Acetaria, a discourse of Sallets—with Kalendarium Hortense, or the gardener's almanack. 4th ed. fol. *London,* 1706.

EVERGREENS, The book of. *See* **Hoopes,** Josiah.

EVERY boy's annual. *See* **Routledge,** Edmund.

——— day book, and table book. *See* **Hone,** William.

——— day cookery for families of moderate income. 12°. *London,* 1867.

——— lady her own flower gardener. *See* **Johnson,** Louisa.

——— little boy's book. A complete cyclopædia of in and out door games, etc. *Illus.* 16°. *London,* 1866.

EVIDENCE, Law of. *See* **Greenleaf,** S.

——— Law of. *See* **Starkie,** T.

——— Patentable invention and scientific evidence. *See* **Spence,** W.

EVOLUTION, On the hypothesis of, physical and metaphysical; by Prof. Edward D. Cope. **University series, No. 4.**

Évrard, Alfred. Les moyens de transport appliqués dans les mines, les usines et les travaux publics. 8°. pl. 4°. *Paris,* 1872.

Digitized by Google

Ewald, L. Notizblatt des Vereins für Erdkunde und verwandte Wissenschaften zu Darmstadt, etc. Hrsg. v. *See* DARMSTADT.

Ewbank, Thomas. A descriptive and historical account of hydraulic and other machines for raising water, ancient and modern. *Illus.* 8°. *New York,* 1842. Later eds., 1851, '56, '76.

—— Experiments on the paddles of steamers, by. *See* **Tredgold,** T. **Steam** engine, 2d series, v. 3.

—— Life in Brazil: a journal of a visit to the land of the cocoa and the palm; with an appendix containing illustrations of ancient South American arts in recently discovered implements and products of domestic industry, and works in stone, pottery, gold, silver, bronze, etc. 8°. *New York,* 1856.

—— Specimens of ancient, oracular and fighting eolipiles; with remarks on dragons and other fire-breathing monsters of mythology and the middle ages. 8°. *New York,* 1845. pp. 31.

—— Thoughts on matter and force; or marvels that encompass us. 8°. *New York,* 1858.

Ewell, James. The medical companion; or, family physician: treating of the diseases of the United States, their symptoms, causes, cure, and means of prevention. 10th ed. 8°. *Philadelphia,* 1848.

EXCAVATIONS and embankments, A new method of calculating. *See* **Trautwine,** John C.

EXCHANGE. Book of sterling exchange on all articles of earthenware. *See* **Book** of sterling exchange.

EXECUTORS and administrators, The law of. *See* **Comstock,** F. G.

EXERCISES, Toys, games and. **Abridgments English Patents, No. 51.**

—— of Blundevil. Treatises on cosmography, globes, maps, mathematical instruments, etc. *See* **Blundevil.**

—— A manual of physical. *See* **Wood,** William.

EXHIBITIONS, Industrial. Berlin, 1844. Bericht über die Gewerbe-Ausstellung zu Berlin, 1844. *See* BERLIN. **Amtlicher** Bericht.

—— —— Brussels, 1835. La Belgique industrielle. Compte rendu de l'exposition en 1835. *See* BRUSSELS. **La Belgique** industrielle.

EXHIBITIONS, Industrial. Brussels, 1841. Rapports du jury et documents de l'exposition de l'industrie belge en 1841. *See* BRUSSELS. **L'Exposition** de l'industrie en 1841.

—— —— Brussels, 1847. Rapport du jury de l'exposition de 1847. *See* BRUSSELS. **L'Exposition** de l'industrie en 1847.

—— —— Cincinnati, 1874. Industrial exposition in Cincinnati, Report of. *See* CINCINNATI.

—— —— Dublin, 1853. Resources of Ireland, as illustrated by the exhibition of 1853. *See* **Sproule,** J.

—— —— Florence, 1850. **Rapporto** della publica esposizione fatta in Firenze, 1850. *See* FLORENCE.

—— —— Leipsic, 1850. Die deutsche Industrie-Ausstellung zu Leipzig, 1850. *See* LEIPSIC.

—— —— London, 1851. Amtlicher Bericht über die Industrie-Ausstellung, London, 1851. Kommission der deutschen Zollvereins-Regierungen. *See* GERMANY. **Deutscher** Zollverein.

—— —— London, 1851. Bericht über die Industrie-Ausstellung zu London, 1851. *See* LONDON.

—— —— London, 1851. Central committee for the United States on the exhibition of 1851. *See* UNITED STATES. **Central committee.**

—— —— London, 1851. Great exhibition of the works of industry of all nations, 1851. *See* LONDON.

—— —— London, 1851. Great exhibition, Report of, by B. P. Johnson. *See* **Johnson,** B. P.

—— —— London, 1851. Handbook to the official catalogue of the great exhibition of 1851. *See* **Hunt,** R.

—— —— London, 1851. Les instrumens d'agriculture à l'exposition universelle de Londres, etc. *See* BELGIUM.

—— —— London, 1851. Journal of the great exhibition, 1851. *See* LONDON.

—— —— London, 1851. Die landwirthschaftlichen Geräthe der Londoner Ausstellung, 1851. *See* **Rau,** K. H.

—— —— London, 1851. Lettres sur l'exposition universelle de Londres. *See* **Blanqui,** J. A.

—— —— London, 1851. Rapport sur les matériaux de construction et de décoration à l'exposition de Londres. *See* **Gourlier.**

Digitized by Google

EXHIBITIONS, Industrial. London, 1851. Tallis' history of the Crystal palace, 1851. *See* **Strutt**, J. G.

—— —— London, 1851. Exposition de 1851. Travaux de la commission française. *See* FRANCE. **Commission** française.

—— —— London, 1851. Year book of facts in the exhibition of 1851. *See* **Timbs**, J.

—— —— London, 1862. L'Algérie à l'exposition de 1862. *See* ALGIERS.

—— —— London, 1862. Special-Catalog der gewerblichen Ausstellung des Zollvereins. *See* GERMANY. **Zollvereins-Regierungen.**

—— —— London, 1862. Catalogue of the fine art department. *See* LONDON.

—— —— London, 1862. Catalogue of the industrial department. *See* LONDON.

—— —— London, 1862. Catalogue of the Zollverein department. *See* GERMANY. **Zollverein.**

—— —— London, 1862. Exhibited machinery, 1862. *See* **Clark**, D. K.

—— —— London, 1862. Handbook of the industrial department. *See* **Hunt**, R.

—— —— London, 1862. Illustrated catalogue of the exhibition of 1862. *See* LONDON.

—— —— London, 1862. Illustrirter Katalog der Londoner Industrie-Ausstellung von 1862. *See* **Hamm**, Wilhelm.

—— —— London, 1862. Landwirthschaftliche Maschinen auf der Industrie-Ausstellung, 1862. *See* **Pintus**, J.

—— —— London, 1862. Reale comitato dell'esposizione internazionale del 1862. Relazione. *See* ITALY.

—— —— London, 1862. Record of the exhibition of 1862. *See* LONDON.

—— —— London, 1862. Relazione dei commissarii speciali, 1862. *See* TURIN.

—— —— London, 1862. Reports of the juries on the exhibition of 1862. *See* LONDON.

—— —— London, 1873. Melbourne. Official record. *See* VICTORIA. **London** exhibition of 1873.

—— —— Lowell, Mass., 1851. First exhibition of the Middlesex mechanic association. *See* LOWELL.

—— —— Mayence, 1842. Bericht über die Industrie-Ausstellung zu Mainz, 1842. *See* **Rösaler**, H.

EXHIBITIONS, Industrial. Melbourne, 1861. Catalogue of the Victoria exhibition of 1861. *See* **Archer**, W. H.

—— —— Melbourne, 1875. Victoria intercolonial exhibition, 1875. *See* VICTORIA.

—— —— Milan, 1806–57. Distribuzioni dei premj d'industria fatte in Milano ed in Venezia, 1806–57. *See* MILAN.

—— —— Munich, 1854. Bericht der Beurtheilungs-Commission bei der Industrie-Ausstellung zu München, 1854. *See* MUNICH.

—— —— Munich, 1854. Katalog der Württembergischen Erzeugnisse in der Industrie-Ausstellung zu München. *See* MUNICH.

—— —— New York, 1853. Art and industry at the Crystal palace, New York, 1853. *See* **Greeley**, Horace.

—— —— New York, 1853. A day in the Crystal palace. *See* **Richards**, W. C.

—— —— New York, 1853. Exhibition of the industry of all nations, 1853. *See* NEW YORK.

—— —— New York, 1853. Industry of the United States. Official report of the exhibition of 1853. *See* **Whitworth**, J., and **Wallis**, G.

—— —— New York, 1853. Official catalogue of the exhibition of 1853. *See* **Richards**, W. C.

—— —— New York, 1853. Special report. *See* **Whitworth**, J.

—— —— Paris, 1819. Description du musée des produits de l'industrie française, 1819. *See* **Le Normand**, L. S., and **Moléon**, J. G. V. de. **Annales** de l'industrie française.

—— —— Paris, 1839. Description de l'exposition de, 1839. *See* PARIS.

—— —— Paris, 1839. Industrie française. Rapport sur l'exposition de 1839. *See* **Jobard**, J. B. A. M.

—— —— Paris, 1844. Exposition de l'industrie française, 1844. Description méthodique. *See* **Burat**, J.

—— —— Paris, 1844. Rapport du jury central, 1844. *See* PARIS.

—— —— Paris, 1849. Rapports du jury sur les produits exposés en 1849. *See* PARIS.

—— —— Paris, 1855. Album de l'exposition universelle, 1855. *See* **Brisse**, L.

Digitized by Google

EXHIBITIONS, Industrial. Paris, 1855. Descriptive catalogue of Württemberg at the exhibition of 1855. *See* STUTTGART. **Württembergische** Handelsgesellschaft.

——— ——— Paris, 1855. Étude des œuvres les plus r marquées. *See* **Laboulaye**, C. P. H.

——— ——— Paris, 1855. Exposition de 1855. Catalogue officiel. *See* PARIS.

——— ——— Paris, 1855. Exposition de 1855. Rapport du jury. *See* PARIS.

——— ——— Paris, 1855. Exposition de 1855. Rapport. *See* **Napoléon**, *Prince.*

——— ——— Paris, 1855. Exposition de 1855. Système de classification. *See* PARIS.

——— ——— Paris, 1855. La industria y las artes en la exposicion de 1855. *See* **Escandon**, P.

——— ——— Paris, 1855. Der landwirthschaftliche Theil der Weltausstellung. Ein Bilder-Album der neuesten und nutzbarsten Maschinen und Geräthe der Landwirthschaft. *See* **Hamm**, Wilhelm.

——— ——— Paris, 1855. Les nouvelles inventions aux expositions universelles. *See* **Jobard**, J. B. A. M.

——— ——— Paris, 1855. Rapports du jury mixte international. *See* PARIS. **Exposition**, 1855.

——— ——— Paris, 1855. La Sicilia all'esposizione di Parigi. *See* SICILY.

——— ——— Paris, 1855. Travail universel, revue des œuvres exposées à Paris, en 1855. *See* **Arnoux**, J. J.

——— ——— Paris, 1855. Visite à l'exposition de Paris en 1855. *See* **Tresca.**

——— ——— Paris, 1855. Visites et études au palais de l'industrie, 1855. *See* **Pascal**, A.

——— ——— Paris, 1855. A walk through the exhibition of 1855. *See* **Walk** through the exhibition of 1855.

——— ——— Paris, 1867. Bericht über den landwirthschaftlichen Theil der Weltausstellung. *See* **Moreau**, Friedrich v.

——— ——— Paris, 1867. Bericht über die Weltausstellung. *See* AUSTRIA. **K. K. Oester. Central-Comité.**

——— ——— Paris, 1867. Catalogue of the British section. In English, French, German and Italian. *See* GREAT BRITAIN. **Commission** to Paris exhibition.

EXHIBITIONS, Industrial. Paris, 1867. Le Danemark à l'exposition universelle. *See* **Schmidt**, Valdemar.

——— ——— Paris, 1867. Deutsche Ausstellungs-Zeitung. *See* **Deutsche.**

——— ——— Paris, 1867. L'exposition universelle. Illustré. *See* **Ducuing**, Fr.

——— ——— Paris, 1867. Études sur les arts textiles à l'exposition en 1867. *See* **Alcan**, Michel.

——— ——— Paris, 1867. Fortschritte der Industrie: nach den Berichten der Weltausstellung. *See* **Fürstedler**, Leopold.

——— ——— Paris, 1867. Les houillères en 1867, d'après les documents de l'exposition universelle. *See* **Burat**, Amédée.

——— ——— Paris, 1867. Illustrirter Katalog der Pariser Industrie-Ausstellung. *See* **Hamm**, Wilhelm.

——— ——— Paris, 1867. Die landwirthschaftlichen Maschinen und Geräthe. *See* **Perels**, Emil.

——— ——— Paris, 1867. Locomotives et matériel de transport. *See* **Taillard**, Ernest.

——— ——— Paris, 1867. Mines, métallurgie, chimie, mécanique, navigation, chemins de fer, constructions, arts et sciences appliquées à l'industrie, Revue de. *See* PARIS. **Exposition univ. de 1867.**

——— ——— Paris, 1867. Mittheilungen über Berg- und Hüttenmaschinen. *See* **Rittinger**, Peter v.

——— ——— Paris, 1867. Notices sur les collections, cartes et dessins relatifs au service des mines. *See* FRANCE. **Ministère de l'agriculture, etc.**

——— ——— Paris, 1867. Notices sur les modèles, cartes et dessins, relatifs aux travaux publics. *See* FRANCE. **Ministère de l'agriculture**, etc.

——— ——— Paris, 1867. Der Pariser Industrie-Ausstellung von 1867 illustrirter Katalog. *See* **Illustrirter** Katalog.

——— ——— Paris, 1867. Rapports du jury international. *See* PARIS. **Exposition univ. de 1867.**

——— ——— Paris, 1867. Reports of United States commissioners. *See* UNITED STATES. **State** department.

——— ——— Paris, 1867. Revue de l'exposition, 1867. *See* **Cuyper**, Ch. de.

——— ——— Paris, 1867. Revue de l'exposition. *See* PARIS. **Exposition univ. de 1867.**

Digitized by Google

EXHIBITIONS, Industrial. Paris, 1867. Technologische Studien auf der Ausstellung. *See* **Wagner**, Johann Rudolf.

——— ——— Paris, 1867. Visites d'un ingénieur à l'exposition universelle. *See* **Oppermann**, C. A.

——— ——— Philadelphia, 1876. Briefe aus Philadelphia. *See* **Reuleaux**, F.

——— ——— Philadelphia, 1876. Collection to illustrate the animal resources of the United States. By G. B. Goode. *See* UNITED STATES **Interior dept. National museum. Bulletin 6.**

——— ——— Philadelphia, 1876. Contributions to the centennial exhibition. *See* **Ericsson**, John.

——— ——— Philadelphia, 1876. The empire of Brazil at the universal exhibition. *See* BRAZIL.

——— ——— Philadelphia, 1876. The national printing office at Lisbon. *See* LISBON.

——— ——— Philadelphia, 1876. Objetos que remite á la exposicion de Filadelfia el colegio nacional de sordo-mudos y de ciegos de Madrid. *See* SPAIN. **Instruccion pública.**

——— ——— Philadelphia, 1876. Representation of the medical department, United States army. *See* UNITED STATES. **War department.**

——— ——— San Francisco, 1871. Exhibition of the Mechanics' institute. *See* SAN FRANCISCO.

——— ——— Vienna, 1873. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873.**

——— ——— Vienna, 1873. Buildings of the exhibition. By L. Bridges. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 4.**

——— ——— Vienna, 1873. K. k. geologische Reichsanstalt. Catalog bei der Wiener Weltausstellung 1873. *See* AUSTRIA. **K. k.** geol. Reichsanstalt.

——— ——— Vienna, 1873. Kunst und Kunstgewerbe auf der Wiener Weltausstellung 1873. *See* **Lützow**, Carl von.

——— ——— Vienna, 1873. Official catalogue of the American department. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873.**

——— ——— Vienna, 1873. Officieller Ausstellungs-Bericht. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873.**

EXHIBITIONS, Industrial. Vienna, 1873. Exhibition of 1873. Reports of the commissioners of Massachusetts. *See* MASSACHUSETTS.

——— ——— Vienna, 1873. Reports of United States commissioners. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873.**

Exner, Wilhelm Franz. Holzarbeitungsmaschinen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Gruppe 13.**

——— Die Tapeten- und Buntpapier-Industrie für Fabrikanten und Gewerbtreibende, sowie für technische Institute, dargestellt von. Mit einem Vorworte von Dr. Karl Karmarsch. *Illus.* 8°. *Weimar*, 1869. **25 Neuer Schauplatz der Künste.**

——— **Nagel**, I., and **Berg**, C. Tapeten, Schreib- etc. Requisiten, Buchbinderei, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

EXPEDITE, The practical. *See* **Thayer**, John A.

Expériences sur les différentes espèces de projectiles creux, faites dans les ports en 1829, 1831 et 1833. 8°. *Paris*, 1837.

——— sur les longitudes, faites à la mer en 1767–1768. Publiées par ordre du roi. 8°. *Paris*, 1768.

EXPERIMENTAL farms. Versuchsfeld zu Frankenfelde. *See* **Ockel**, E.

EXPERIMENTS on the produce and nutritive qualities of grasses and other plants used as food of domestic animals; instituted by the duke of Bedford. *See* **Sinclair**, George.

EXPLORATIONS and surveys for the railroad route to the Pacific. *See* UNITED STATES. **Congress.**

EXPLORING expedition. Letters, etc., relating to the delay of the sailing of the. *See* UNITED STATES. **Message** from the president.

——— ——— Narrative of the. *See* **Wilkes**, Charles.

EXPLOSIONS, Chapter on. *See* **Armstrong**, R.

——— Ursachen der Dampfkessel-Explosionen. *See* **Scheffler**, *Dr.* H.

EXPLOSIVES. *See* **Scoffern**, J.

——— Dynamit; ihre Bedeutung und Gefährlichkeit. *See* **Franzl**, Isidor.

——— Fabrication of matches, gun cotton, colored fires, and fulminating powders. *See* **Dussauce**, H.

Digitized by Google

EXPLOSIVES. Feux de guerre, etc. *See* **Reinaud** and **Favé.**

——— Zündwaaren und Explosivstoffe. Von Wilhelm F. Gintl. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Gruppe 3.**

EXPORTS and imports as showing the advancement of every nation. *See* **Baker,** J. L.

Exposition universelle (L') de 1867. Illustrée. Publication internationale autorisée par la commission impériale. Rédacteur en chef, M. Fr. Ducuing. 2 v. fol. *Paris,* 1867.

EXPOSITIONS, Industrial. *See* **Exhibitions,** Industrial.

Expositor (The); an illustrated recorder of inventions, designs, and art manufactures. 3 v. fol. *London,* 1851-52.

EXPRESS companies, History of. *See* **Stimson,** A. L.

EXPRESSION, The anatomy and philosophy of. *See* **Bell,** *Sir* Charles.

EYE and hand; lessons in drawing. *See* **Fowle,** William B.

——— Handbook of the diseases of the. *See* **Salomons,** A.

——— Human. *See* **Metz,** A.

——— A short account of the. *See* **Ayscough,** James.

——— A treatise on the. *See* **Coddington,** Henry.

——— A treatise on the diseases of the. *See* **Lawrence,** W.

——— Treatise on the diseases of the. *See* **Mackenzie,** William.

——— Treatise on the diseases of the. *See* **Stellwag,** Carl von Carion. [1]

EYES, Economy of the. *See* **Kitchiner,** William.

Eyton, T. C. A history of the oyster, and the oyster fisheries. 8°. *London,* 1858.

F*,** I. Cryptomenysis patefacta; or the art of secret information disclosed without a key. 12°. *London,* 1685.

Faber, William L. Elements of chemistry: ed. by. *See* **Regnault,** H. V.

FACTITIOUS airs, An essay on the medicinal properties of. *See* **Cavallo,** Tiberius.

FACTORIES. Die Fabriksgesetze Englands seit 1833. *See* AUSTRIA. **K. k. Handelsministerium.**

——— Regelung der Arbeitszeit in Fabriken. *See* AUSTRIA. **K. k. Handelsministerium.**

FACTS and figures, Engineering. 1863-68. *See* **Brown,** Andrew Betts.

——— The computist's manual of. *See* **Winslow,** E. S.

——— in relation to the consumption of fuel, for the purpose of generating steam. 8°. *Boston,* 1852.

Fairbairn, Henry. A treatise on the political economy of railroads; to which is added a letter containing a plan for converting turnpike roads into railroads. 2d ed. 8°. *London,* 1836. pp. 34.

Fairbairn, William. The application of cast and wrought iron to building purposes. 8°. *London,* 1854. Same, 2d ed., 1857-58.

——— Biography of scientific men. Note by. *See* **Arago,** D. F. J.

——— Iron: its history, properties, and processes of manufacture. 8°. *Edinburgh,* 1861.

——— Steam navigation; appendices A and B by. *See* **Tredgold,** T.

——— Treatise on mills and millwork. Part 1. On the principles of mechanism; on prime movers, comprising the accumulation and estimation of water power, the construction of water-wheels and turbines, the properties of steam, the varieties of steam engines, boilers and windmills. Part 2. On machinery of transmission, and the construction and arrangement of mills. 2 v. 8°. *London,* 1861-63.

——— Useful information for engineers, containing experimental researches on the collapse of boiler flues and the strength of materials; lectures on popular education and various subjects connected with mechanical engineering. 1st and 2d series. 8°. *London,* 1856.

——— Useful metals and their alloys, by. *See* **Scoffern,** J., and others.

——— Water wheels with ventilated buckets, by. **Weale's papers on engineering, v. 6.**

Fairbanks, Lorenzo. The new lightning calculator; practical methods of arithmetical computations. 12°. *Philadelphia,* 1868. pp. 50.

——— The science and practice of bookkeeping by double and single entry. roy. 8°. *Philadelphia,* 1866.

Fairfield, George A. Report on sewing machines. UNITED STATES. **State dept.**

Digitized by Google

Fairfield, George A.—Continued.
Reports Vienna exhib. 1873. v. 3.

Fairholt, F. W. A dictionary of terms in art. *Illus.* 8°. *London,* 1854.

—— Tobacco; its history and associations; an account of the plant and its manufacture, with its modes of use, in all ages and countries. 12°. *London,* 1876.

Fairman, E. St. John. A treatise on the petroleum zones of Italy. 8°. *London,* 1868.

FAIRS. World's fairs, agricultural, etc. *See* **Exhibitions,** Industrial.

Falconer, William. A new universal dictionary of the marine. To which is annexed a vocabulary of French sea phrases and terms of art. Modernized and enlarged by William Burney. *Illus.* 4°. *London,* 1815.

Falcot, P. Handbuch der Webekunst. *See* **Gilroy,** C. G. **157 Neuer Schauplatz der Künste.**

—— Traité encyclopédique et méthodique de la fabrication des tissus. Texte, 1 v.; planches, 1 v. 2e éd. 2 v. 4°. *Elbeuf,* 1852.

Falke, Jakob. Goldschmiedkunst. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Gruppe 7.**

—— and **Lobmeyer,** Ludwig. Glasindustrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Gruppe 9.**

FALMOUTH, England. The royal Cornwall polytechnic society. Annual reports, 2d–8th, 27th, 29th, 33d–35th, 38th–43d. 1834–40, 1859, 1865–67, 1870–75. 8°. *Falmouth,* 1834–75——.

Family and ship medicine chest companion; a compendium of domestic medicine, surgery and materia medica, with directions for diet and management of the sick room; by a practising physician. 8°. *Philadelphia,* 1851.

—— names, A dictionary of. *See* **Lower,** Mark Antony.

—— physician. *See* **Downing,** Beal P.

FANCY turning, Specimens of. *See* **Specimens.**

Fankhauser, F. Die Drahtseilriese, mit besonderer Berücksichtigung der Holztransport-Einrichtung im kleinen Schlierenthal, Kanton Unterwalden. 4°. *Bern,* 1872.

FANNING islands, Natural history of, by T. H. Streets. UNITED STATES. **Interior** dept. **National musuem. Bulletin 7.**

FANS, rotary, Conditions and limits which govern the proportions of. *See* **Briggs,** Robert.

Faraday, Michael. Chemical manipulations; instructions to students on methods of performing experiments of demonstration, or of research. 8°. *London,* 1829.

—— Correlation and conservation of forces: by Prof. Grove and others. *See* **Grove,** William R.

—— A course of six lectures on the chemical history of a candle: to which is added, a lecture on platinum. Ed. by William Crookes. 12°. *London,* 1861.

—— Experimental researches in electricity. 2 v. 8°. *London,* 1839–44.

Faraday as a discoverer. *See* **Tyndall,** John.

Färbers Taschenbuch (Des), Hülfsbuch für Färber, Zeug-Drucker, Kunstwäscher, Fabrikanten und Händler, von Farbstoffen, Chemikalien, etc. 16°. *Leipzig,* 1875.

Farey, John. A treatise on the steam-engine; historical, practical and descriptive. *Illus.* 4°. *London,* 1827.

Farley, Henry W. Interference between the application of Farley and the patent of E. G. Allen: argument of council. *See* **Robb,** J. B.

Farley, Henry W., Interference between—and the assignees of E. G. Allen. *See* **Mason,** C.

Farley, John. The London art of cookery, and domestic housekeeper's complete assistant; uniting principles of elegance, taste, and economy; adapted to the use of servants and families. 12th ed. 8°. *London,* 1811.

Farm (The). A manual of practical agriculture; or, how to cultivate all the field crops. Rev. ed. 12°. *New York,* 1866.

—— (The). A pocket manual of practical agriculture; or, how to cultivate all the field crops; embracing the nature and action of soils and manures; the principles of rotation in cropping; directions for irrigating, draining, subsoiling, fencing, and planting hedges; descriptions of agricultural implements; instructions in the cultivation of the various field crops, orchards, etc., etc. With a most valuable essay on farm management. By the

Digitized by Google

Farm—Continued.
author of "How to do business," "How to behave," etc. 12°. *New York*, 1858. **Fowler and Wells. Rural handbooks, No. 2.**
—— account-keeping. *See* **Wilson**, J. M.
—— Die Bewirthschaftung des Berkheimer Hofs. *See* **Lempp**, Karl.
—— Book of the. *See* **Stephens**, H.
—— Cottage, farm and villa architecture and furniture. *See* **Loudon**, J. C.
—— crops, Our. *See* **Wilson**, John.
—— implements and machines, Book of. *See* **Slight**, J., and **Burn**, R. S.
—— implements and machinery. *See* **Thomas**, John J.
—— insects of Great Britain and Ireland. *See* **Curtis**, J.
—— lands. Bonitirung der Ackererde. *See* **Knop**, W.
—— My ten rod. *See* **Gilman**, *Mrs.* Maria,
—— Pests of the. *See* **Pests** of the farm.
Farmer and gardener; containing original essays and communications, on agriculture, horticulture, rural and domestic economy. v. 1–5. 4°. *Baltimore*, 1835–39.
—— and mechanic; devoted to agriculture, mechanics, manufactures, science and the arts. v. 1–6. 4°. *New York*, 1847–52.
—— and rural economist, The complete. *See* **Fessenden**, Thomas G.
—— The prairie. *See* **Prairie** farmer.
FARMER'S encyclopædia. *See* **Johnson**, C. W.
—— handbook, American. *See* **American** farmers'.
—— instructor, The American. *See* **Wiggins**, Francis S.
—— library, and monthly journal of agriculture. 1 odd v. Ed. by John S. Skinner. 8°. *New York*, 1845.
—— magazine. 2d series, v. 17–24, 1848–51. 3d series, v. 1–50, 1852–76. [v. 21, 2d series, wanting.] 8°. *London*, 1848–76——.
—— manual, The young. *See* **Todd**, S. Edwards.
—— Notes for American farmers. *See* **Norton**, John P.
—— promotion book. *See* **Reinhold**, C. G.
—— register, The. A monthly publication, devoted to the improvement of the practice, and support of the interests of agriculture. Ed. by Edmund Ruffin. v. 1–10. 8°. *Shellbanks and Petersburg, Va.*, 1834–42.
FARMING, Article on. *See* **Donaldson**, J.
—— Le bon fermier. *See* **Barrall**, J. A.
—— by inches; or, "With brains, Sir." Uniform with "My ten rod farm." 12°. *Boston*, 1869.
—— Farm engineer. *See* **Ritchie**, R.
—— Feldwirthschaft; von A. A. Schmied und J. Wiesner. *See* **Vienna. Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**
—— for boys. What they have done, and what others may do in the cultivation of farm and garden; how to begin, how to proceed, and what to aim at. By the author of "Ten acres enough." *Illus.* 12°. *Boston*, 1868.
—— Guide des propriétaires des biens ruraux. *See* **Gasparin**, De.
—— Handbuch der Landgüter-Verwaltung. *See* **Veit**, Raimund.
—— Practical. *See* **Pringle**, R. O.
—— Der Schwäbische Bauern-Freund. *See* **Schwäbische.**
—— Vriend van der Landman. *See* **Vriend.**
—— Wirthschaftsorganisation von Landgütern. *See* **Funke**, Walter.
Farquhar, Arthur B. Illustrated catalogue and price list of the Pennsylvania agricultural works. 8°. *York, Pa.*, [1877.]
Farrar, John. An experimental treatise on optics; comprehending the leading principles of the science, and an explanation of optical instruments and optical phenomena. 8°. *Cambridge*, 1826.
Farrar, Timothy. Manual of the constitution of the United States of America. 8°. *Boston*, 1867.
Farre, F. J. Materia medica and therapeutics; being an abridgment of the late Dr. Pereira's elements of materia medica, arranged in conformity with the British pharmacopœia; assisted by R. Bentley and R. Warrington; ed. by Horatio C. Wood, jr. 8°. *Philadelphia*, 1866.
FARRIERY. Abridgments English Patents, No. 53.
—— The American veterinary journal. *See* **American** veterinary journal.
—— Der Cur- und Hufschmied. *See* **Zerrenner**, J. F. **109 Neuer Schauplatz der Künste.**
—— The gentleman's new pocket farrier. *See* **Mason**, Richard.
—— Hippiatria sive marescalia. *See* **Rusius**, Laurentius.

Digitized by Google

FARRIERY. The illustrated horse doctor. *See* **Mayhew**, Edward.

——— The illustrated horse management. *See* **Mayhew**, Edward.

——— Le nouveau parfait maréchal. *See* **Gersault**, François A. de.

Fasbender, Franz. Die Anlage von Bierbrauereien, mit specieller Berücksichtigung der Wiener Brauart. 8°. *Leipzig*, 1872.

FASHION, Gazette of. *See* **Leslie**, Frank.

——— *See* **Harper's bazaar.**

FASHIONS. *See* **Modenwelt**, Die.

FATIGUE of metals under repeated strains. *See* **Spangenburg**, Ludwig. **Van Nostrand's science series, No. 23.**

FATS. Abridgments English Patents, No. 27.

——— Fettwaaren und Producte der trockenen Destillation; von Heinrich Schwarz. VIENNA. **Gen.-Dir. der Weltausst. Bericht. Gruppe 3.**

——— Die Industrie der Fette und Oele. *See* **Perutz**, H.

Fau, J., and **Chevalier,** Charles. Nouveau manuel complet du physicien-préparateur, ou description d'un cabinet de physique. Accompagné d'un atlas renfermant 88 planches. T. 1-2, 18°; pl., 8°. Paris, 1853. **124° Manuels Roret.**

FAUCETS. New York Croton and steam faucet company; drawings. *See* **New** York Croton, etc.

Fauché, Jules. Considérations sur l'établissement de services à vapeur sur l'océan; suivies d'un projet de création de trois grandes lignes de postes maritimes entre la France et l'Amérique. 4°. *Bordeaux*, 1856.

Fauck, A. Anleitung zum Gebrauche des Erdbohrers. *Illus.* 8°. *Leipzig*, 1877.

FAUNA Americana. *See* **Harlan**, Richard.

——— The extinct vertebrate fauna of the western territories. UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden.**

Faure. Compte rendu de l'exposition en 1835. *See* BRUSSELS.

Faure. Dictionnaire des arts, etc. *See* **Laboulaye**, C. P. L.

Faust, poligrafish-illustrirte Zeitschrift für Kunst, Wissenschaft, Industrie und Unterhaltung. Redigirt von Herman Meynert. 7 B. Jahrg. 1-9, 1854-62. [B. 4 wanting.] fol. *Wien*, 1854-62.

Favé. Du feu grégeois, etc. *See* **Reinaud.**

FEATHERS. Die Federschmückerei. *See* **Schreiber**, E. **219 Neuer Schauplatz der Künste.**

Féburier. Histoire naturelle des abeilles, suivie de la manipulation et de l'emploi du miel et de la cire. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 5.**

FEEBLE-minded, imbecile, and idiotic. *See* **Duncan**, Martin P., and **Millard**, William.

FEET, Book of the. *See* **Hall**, J. S.

——— costume, History of. *See* **Boot** and shoe maker's assistant.

Felkin, William. A history of the machine wrought hosiery and lace manufactures. 8°. *Cambridge*, 1867.

Fellmer, R. Wörterbuch der Dampfmaschinen Kunde mit Einschluss der See- und Fluss-Schiffs-Dampfmaschinen, der Locomotiven und Locomobilen. 8°. *Cottbus*, 1860.

Felton, John H. The decimal system: an argument for American consistency in the extension of the decimal scale to weights and measures, in harmony with the national currency. 18°. *New York*, 1857.

Felton, W. A treatise on carriages and harness; being 3d ed. of "Modern carriages" corrected and revised. 3 v. 8°. *London*, 1805.

FEMALES, Diseases of. *See* **Dewees**, W. P.

Fénelon's fables. *See* **Science,** Miscellaneous.

Fenwick, Robert W. Argument in opposition to the extension of the patent granted to C. H. McCormick. *See* **Lawrence**, D. C.

Fenwick, Thomas. Four essays on practical mechanics: 1. Water wheels; 2. The steam engine; 3. Mills; 4. The simplification of machinery. 8°. *Newcastle-upon-Tyne*, 1801. [Bound with Banks's Treatise on mills.]

Fenzl, Eduard. Gartenbau. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

FERDINANDEUM. Bericht des Verwaltungs-Ausschusses über die Jahre 1857-73. *See* TYROL.

——— Rechnungs-Ausweis und Personalstand, 1863. *See* TYROL.

——— Zeitschrift. *See* TYROL.

Digitized by Google

Fergus, Henry. The history of the western world. The United States. 2 v. 16°. *London, n. d.* **Lardner's cabinet cyclopædia, v. 31, 32.**

Fergusou, James. Tables and tracts, relative to several arts and sciences. 8°. *London,* 1767.

——— The works of, comprising astronomy, explained upon Sir Isaac Newton's principles; lectures on select subjects; and essays and treatises. Ed. by David Brewster. *Illus.* 5 v. 8°. *Edinburgh,* 1823.

——— the astronomer, Life of. *See* **Henderson,** E.

Fergusou, S., *fils.* Histoire du tulle et des dentelles mécaniques, en Angleterre et en France. *Illus.* 12°. *Paris,* 1862.

Fergusson, James. Handbook of architecture: a concise account of the different styles of architecture prevailing in all ages and all countries. 2d ed. 8°. *London,* 1859.

——— History of architecture, in all countries, from the earliest times to the present day. 3 v. 8°. *London,* 1865–67.

——— Rude stone monuments, in all countries; their ages and uses. 8°. *London,* 1872.

Fergusson, William. A system of practical surgery. 3d Am. from the last Eng. ed. 8°. *Philadelphia,* 1848.

FERMENTATION. Hall's distiller, containing a treatise on fermentation. *See* **Hall,** Harrison.

——— Lehrbuch der Gährungs-Chemie. *See* **Mayer,** Adolf.

——— Über Gährung, über Quelle der Muskelkraft und Ernährung. *See* **Liebig,** Justus von.

Fermond, Charles. Monographie du tabac: comprenant l'historique, les propriétés thérapeutiques, physiologiques, et toxicologiques du tabac; la description des principales espèces employées; sa culture, sa préparation et l'origine de son usage; son analyse chimique, ses falsifications, sa distribution géographique, son commerce, et la législation qui le concerne. 8°. *Paris,* 1857.

FERN-book for everybody. *See* **Cooke,** M. C.

FERNS, British and foreign. *See* **Smith,** John.

Ferrey, Benjamin. Recollections of A. N. Welby Pugin, and his father, Augustus Pugin; with notices of their works. Appendix, by E. Sheridan Purcell. 8°. *London,* 1861.

Ferrier. The functions of the brain. *See* **Science lectures for the people, series 7.**

FERRO-photographic process. *See* **Griswold,** V. M.

FERROTYPY. Trask's ferrotype. *See* **Trask,** A. K. P.

Ferry, Claude Joseph. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

FERTILIZERS. *See* **Johnson,** C. W.

——— Report on. By C. Collier. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

Fessenden, Thomas Green. The American kitchen gardener; containing directions for the culture of vegetables, garden fruits, strawberry, raspberry, gooseberry, currants, melons, etc.; rev. from the 35th ed. 12°. *New York,* 1852.

——— Breeding domestic animals; ed. by. *See* **Moubray,** B.

——— The complete farmer and rural economist; a compendious epitome of agricultural and rural economy. 12°. *Boston,* 1838.

——— An essay on the law of patents for new inventions. 2d ed. 8°. *Boston,* 1822.

——— The register of arts; or, a compendious view of some of the most useful modern discoveries and inventions. 8°. *Philadelphia,* 1808.

Feuchtwanger, L. A popular treatise on gems; in reference to their scientific value; a guide for the teacher of natural sciences, the lapidary, jeweller, and amateur. 8°. *New York,* 1859.

Feuchtwanger, Lewis. Fermented liquors: a treatise on brewing, distilling, rectifying, and manufacturing sugars, wines, spirits, and all known liquors; including cider and vinegar; also directions in medicine, metallurgy, pyrotechny, and the arts in general. *Illus.* 12°. *New York,* 1858.

Feutry, Aimé Ambroise Joseph. Combinaisons mécaniques, par J. Botterman; publiées par. PARIS. **Acad. roy. des sc., arts et métiers, v. 12; also v. 9.**

FEVER, Lectures on. *See* **Merrill,** A. P.

Digitized by Google

FEVER, Typho-malarial, by J. J. Woodward. *See* UNITED STATES. War department.

FEVERS, Lectures on the eruptive. *See* **Gregory**, George.

FIBRO-bronchitis. *See* **Buckler**, Thomas H.

FIBROUS plants. Deutschlands technische Pflanzen, etc. *See* **Calwer**, C. G.

——— ——— The fibre plants of India, Africa, and our colonies. *See* **Dickson**, James H.

——— substances, History of. *See* **History.**

Fichte, J. G. The science of rights. Transl. from the German by A. E. Kroeger. 12°. *Philadelphia*, 1869.

Ficker, Adolf. Die Völkerstämme der österreichisch-ungarischen Monarchie, ihre Gebiete, Gränzen und Inseln. 8°. *Wien*, 1869.

Field, David Dudley. A manual of pleading under the code of the state of New York. 8°. *Albany*, 1856.

Field, George. Chromatography; or, a treatise on colours and pigments, and of their powers in painting. New ed. 8°. *London*, 1841. Same, Salter's ed. *London*, 1869.

——— Rudiments of the painter's art; or, a grammar of colouring applicable to operative painting, decorative architecture, and the arts: with coloured illustrations and practical instructions concerning the modes and materials of painting, etc. 12°. *London*, 1850. **Weale's series, Nos. 27, 28.**

Field, Henry M. History of the Atlantic telegraph. 12°. *New York*, 1866.

Field book of sports and pastimes in the United Kingdom. By the author of "Wild sports of the west." 8°. *London*, 1833.

——— engineer, The. *See* **Clairac**, *M. Le Chevalier* de.

——— hospitals. Krankenpflege im Felde. *See* **Gurlt**, E.

——— ——— of the army of the Potomac. *See* **H.**, *Mrs.*

——— ——— Verbandplatz und Feldlazareth. *See* **Esmarch**, F.

——— mice. Vertilgung der Feldmäuse. *See* **Beste** Art.

——— service in war. *See* **Lippitt**, Francis J.

Fielding, T. H. The art of engraving: with the various modes of operating. *Illus.* 8°. *London*, 1844.

FIG-TREE. Over de Afrikaansche vijgeboomen. *See* **Miguel**, F. A. W.

Figuier (Guillaume), Louis. L'année scientifique et industrielle, ou exposé annuel des travaux scientifiques, des inventions et des principales applications de la science à l'industrie et aux arts, qui ont attiré l'attention publique en France et à l'étranger. T. 1-22. 1856-76. [In 1858, 2 v. were published.] 18°. *Paris*, 1857-77——.

——— Les applications nouvelles de la science à l'industrie et aux arts en 1855; pour servir d'introduction à l'année scientifique et industrielle. 2e éd. 8°. *Paris*, 1857.

——— Exposition et histoire des principales découvertes scientifiques modernes T. 1. Machines à vapeur; Bateaux à vapeur; Chemins de fer. T. 2. Machine électrique; Bouteille de Leyde; Paratonnerre; Pile de Volta. T. 3. Photographie; Télégraphe aérienne et électrique; Galvanoplastic et dorure chimique; Poudres de guerre et poudres-coton. T. 4. Aérostats; Éclairage au gaz; Éthérisation; Planète Le Verrier. 4 v. 5e éd. 12°. *Paris*, 1858.

——— Les grandes inventions, anciennes et modernes, dans les sciences, l'industrie et les arts. 8°. *Paris*, 1861.

——— The insect world: a popular account of the orders of insects: together with a description of the habits and economy of some of the most interesting species. Transl. from the French. 8°. *London*, 1868.

——— Reptiles and birds: a popular account of their various orders, with a description of the habits and economy of the most interesting. Ed. and adapted by Parker Gillmore. 8°. *London*, 1870.

——— The world before the deluge. A new ed. The geological portion revised, and much original matter added, by Henry W. Bristow. 8°. *New York*, 1867.

FIGURE skating, A system of. *See* **Vandervell**, H. E., and **Witham**, T. Maxwell.

FILTRATION by ascent. *See* **Science**, Miscellaneous.

Digitized by Google

FILTRATION of river waters, for the supply of cities, as practiced in cities in Europe. *See* **Kirkwood**, James P.

FINANCE. Commercial and financial legislation of Europe and America. *See* **McGregor**, J.

——— Cyclopædia of. *See* **Waterston**, W., and **Burton**, J. H.

FINANCES. Le finanze dei comuni e delle province dei Modena. *See* **Gropelli**, Emilio Serra.

——— Report on the state of the. *See* UNITED STATES. **Treasury** department.

Fincham, John. Directions for laying off ships on the mould-loft floors: with some instructions for drawing ships in perspective, etc. 2d ed. Text, 8°; pl., fol. *London*, 1840.

——— An outline of shipbuilding. Part 1. Methods of constructing the body; instructions for making calculations, with examples; investigations and developments of principles. Part 2. On the actual building of ships; the method of forming and combining the parts. Part 3. The principal materials used in shipbuilding; timber, iron and copper. Part 4. A vocabulary of terms, with corresponding terms in foreign languages. 3d ed. Text, 8°; pl., fol. *London*, 1852.

——— A treatise on masting ships and mast making. 2d ed. Text, 8°; pl., fol. *London*, 1843.

FINE arts, Annals of the. *See* **Annals** of the fine arts.

——— ——— Biographical history of. *See* **Spooner**, S.

——— ——— Catalogue of the fine art department. *See* LONDON. **Exhibition, 1862.**

——— ——— Écho de la littérature et des beaux arts. *See* **Écho** de la littérature.

——— ——— Handbooks of the Crystal palace. *See* **Crystal palace library.**

——— ——— in Great Britain and Ireland. *See* **Taylor**, W. B. Sparsfield.

——— ——— of the English school. *See* **Britton**, John.

——— ——— Photographic and fine art journal. *See* **Photographic.**

——— ——— quarterly review, The. 5 v. 1863–67. roy. 8°. *London*, 1863–67.

——— ——— Recueil des beaux arts. *See* **Moléon**, J. G. V. de.

FINE arts. Report on Paris exposition, 1867. By Frank Leslie. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 1.**

Fink, Franz. Arbeiten des Schlossers; fortgesetzt von. *See* **Rössler**, H.

——— Die Schule des Bauschlossers. 2 B. in 1. 8°. *Leipzig*, 1859.

——— Vorlegeblätter für die Handwerkszeichenschulen im Grossherzogthum Hessen. 4°. *Darmstadt*, 1859.

Fiquet. Art du mouleur en plâtre. PARIS. **Acad. des sc., arts et métiers, v. 14.**

FIRE-ARMS. *See* **Bolton**, G.

——— and other weapons. **Abridgments English Patents, No. 10.**

——— Argument in the appeal from the decision of Hon. P. F. Thomas, refusing a patent to Dr. Maynard for his breech loading fire-arms. *See* **Robbins**, Z. C.

——— Armes à feu portatives. *See* **Marès**, Léon.

——— Les armes à feu portatives. *See* **Panot**, L.

——— Les armes de guerre rayées. *See* **Mangeot**, H.

——— Carabines de guerre. *See* **Charrin.**

——— Construction et fabrication des armes à feu. *See* **Homilius**, *Col.*

——— Description de l'armement rayé de l'infanterie européenne en 1858. *See* **Gaugler de Gempen.**

——— Description of small. *See* **Greener**, W.

——— Die englische Gewehrfabrication. *See* **Greener**, W. **83 Neuer Schauplatz der Künste.**

——— Étude des armes. *See* **Xylander**, J.

——— Examen des différences entre les armes à feu françaises et anglaises. *See* **Schlimmbach**, C. P.

——— Experiments with small arms. *See* UNITED STATES. **War** department.

——— Fabrication et emploi des armes de l'infanterie. *See* **Masquelez.**

——— Geschichte der Handfeuerwaffen. *See* **Schön**, J.

——— History and science of. *See* **Deane.**

——— Indexes of patents. *See* GREAT BRITAIN. **Great** seal patent office.

——— Interference between Palmer and Nugent: argument. *See* **How**, T. P.

——— Manuel des armes à feu. *See* **Dub**, A.

Digitized by Google

FIRE-ARMS, Manufacture of rotating chambered breech. *See* **Colt**, S.

——— Ménoire sur les armes à feu rayées de l'infanterie et de la cavalerie. *See* **Thiroux.**

——— Notice historique sur les armes rayées à projectiles allongés. *See* **Delvigne**, H. G.

——— Des nouvelles armes rayées. *See* **Marès**, Léon.

——— Past and present state of. *See* **Chesney**, F. R.

——— Technologie des armes à feu. *See* **Meyer**, M.

——— La théorie du tir des armes à feu rayées. *See* **Rouvroy**, W. H. von.

——— Traité du fusil de chasse. *See* **Mangeot**, H.

FIRE engines. Beschrijving der slangbrand-spuiten. *See* **Heiden**, J. van der, and J. van der, *de jonge.*

——— ——— Fire prevention and extinction. *See* **Braidwood**, James.

——— ——— Konstruktion der Pumpen, Dampf- und Handfeuerspritzen, etc. *See* **Hoelder**, Georg. **280 Neuer Schauplatz der Künste.**

——— ——— Schlangen-Feuerlösch-Spritzen. *See* **Alfing**, C. **129 Neuer Schauplatz der Künste.**

——— extinguisher; the combined patent, as adopted by the fire departments of Boston, New York and Cincinnati. Every man his own fire brigade. 16°. *Cincinnati*, 1870.

——— gilding and silvering. Electro-chemische Feuervergoldung und Versilberung. *See* **Günther**, Constantin.

——— Liquid. Feu liquide. *See* **Adts**, N.

——— places, Our domestic. *See* **Edwards**, F., *jr.*

——— proofing. **Abridgments English Patents, No. 16.**

——— protection. Ueber Flammenschutzmittel, und über einige Versuche, zwei neue Flammenschutz-Praeparate in die Praxis einzuführen. *See* **Patera**, Adolph.

——— works. Anweisung zur Feuerwerkerey. *See* **Stövesandt**, J. C.

——— ——— Artificial. *See* **Jones**, *Captain.*

——— ——— Manuel de l'artificier. *See* **Vergnaud**, A. D. **29 Manuels Roret.**

——— ——— Treatise on. *See* **Smith**, G.

FIREMAN, The: the fire departments of the United States, with a full account of all large fires, etc. *See* **Dana**, David D.

FIRES, fire engines and fire brigades. *See* **Young**, C. H. T.

——— in theatres. Theaterbrände. *See* **Fölsch**, August.

——— Method of extinguishing. *See* **Godfrey**, A.

——— Observations upon fire, with a view to the best and most expeditious methods of extinguishing it. *See* **Young**, David.

FIRING. Brennmaterialien und Feuerungsanlagen. *See* **Grothe**, Hermann. **285 Neuer Schauplatz der Künste.**

First book of geometry; including plane and solid geometry, and an introduction to trigonometry. 24°. *London*, 1835.

——— exercises in light, shade and color; a supplement to "Drawing for young children." *Illus.* 24°. *London*, 1848.

——— lessons in botany and vegetable physiology. *See* **Gray**, Asa.

——— thoughts; or, beginning to think. American system of education. By a literary association. 8°. *New York*, 1853.

Fischbach. Encyklopädie der Landwirthschaft; bearbeitet von. *See* **Schnee**, G. H.

Fischer, Anton. Die Likör-Fabrikation in ihrem ganzen Umfange. Vollständiges Hand- und Hülfsbuch für Branntweinbrenner, Conditoren, Distillateure, Gast- und Schenkwirthe, sowie für Kaufleute. 8°. *Leipzig*, 1863.

Fischer, Ferdinand. Die Verwerthung der städtischen und Industrie-Abfallstoffe mit besonderer Rücksicht auf Desinfection, Städtereinigung, Leichenverbrennung und Friedhöfe. 8°. *Leipzig*, 1873.

Fischer, S. Beitrag zur Kenntniss der Ostracoden. Aus den Abhandlungen der k. bayerischen Akademie der Wissenschaften, 2te Cl., 7ter Bd., 3te Abth. 4°. *München*, 1855.

Fischer, Thomas. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse**, J. A.

Fischer de Waldheim, G. Bulletin de la Société impériale des naturalistes de Moscou, publié par. *See* **Moscow.**

Fischhof, Joseph. Versuch einer Geschichte des Clavierbaues. Mit besonderem Hinblicke auf die Londoner grosse Industrie-Ausstellung im Jahre 1851. 8°. *Wien*, 1853.

Fish, Robert. Manual of heating stoves, greenhouses, pits, and frames, by means

Digitized by Google

Fish, Robert—Continued.
of hot water flues, heated air, and fermenting materials. 16°. *London*, 1864. [?]

FISH and fishing. *See* **Herbert,** H. W.

——— and how to cook it. *See* **Watts,** Elizabeth.

——— breeding. Commission de pisciculture. *See* FRANCE.

——— ——— Fécondation artificielle des œufs de poisson. *See* **Haxo,** d'Épinal.

——— ——— Künstliche Fisch-Erzeugung. *See* **Fraas.**

——— ——— Künstliche Fisch-Erzeugung. *See* **Haxo,** d'Épinal.

——— ——— La pisciculture. *See* **Jourdier,** A.

——— ——— Traité de pisciculture. *See* **Koltz,** J. P. J.

——— ——— Treatise on artificial. *See* **Fry,** W. H.

——— culture. *See* **Francis,** Francis.

——— ——— *See* **Norris,** Thaddeus.

——— ——— Artificial propagation of fish. *See* **Garlick,** Theodatus.

——— How to cook. *See* **Household manuals, v. 2.**

Fisher, George P. Life of Benjamin Silliman. 2 v. 12°. *New York*, 1866.

Fisher, George Thomas, *jr.* Photogenic manipulation, containing theory and plain instructions in photography. Part 1. Calotype, chrysotype, cyanotype, chromotype, energiotype, anthotype, amphitype. Part 2. Daguerreotype, thermography, electrical and galvanical impressions. From 2d London ed. *Illus.* 16°. *Philadelphia*, 1845.

Fisher, Redwood. The national magazine and industrial record. v. 1–3, June, 1845, to Nov., 1846. 8°. *New York*, 1845–46. *n. t. p.*

Fisher, Richard Swainson. Atlas of the world; descriptions by. *See* **Colton,** G. W.

——— The book of the world: an account of all republics, empires, kingdoms, and nations, in reference to their geography, statistics, commerce, etc.; with a brief outline of their rise, progress and present condition. 2 v. roy. 8°. *New York*, 1849.

——— The progress of the United States of America, from the earliest periods—geographical, statistical and historical. 8°. *New York*, 1854.

Fisher, Samuel. Reports of cases arising upon letters-patent for inventions, determined in the circuit courts of the United States. v. 1–6, 1867–74. 8°. *Cincinnati*, 1867.

——— In memoriam. *See* **In memoriam.**

Fisher, Thomas. Mathematics simplified, and made attractive; or, the laws of motion explained. 8°. *Philadelphia*, 1853.

FISHERIES, Report of the commissioners of, for the year ending January 1, 1868. *See* MASSACHUSETTS. **Report of the commissioners.**

——— Salmon. *See* **Young,** Archbald. **British industries.**

——— Sea. *See* **Holdsworth,** E. W. H. **British industries.**

——— Traité des pêches, par H. L. Duhamel, du Monceau et de La Marre. PARIS. **Acad. des sc., arts et métiers, v. 34–36; also v. 5, 10, 11.**

FISHES, History of British. *See* **Yarrell,** W.

——— Natural history of. *See* **Swainson,** W. **Lardner's cabinet cyclopædia, v. 117, 118.**

——— of the Bermudas. By G. Brown Goode. UNITED STATES. **Interior dept. National museum. Bulletin 5.**

FISHING. The American angler's own book. *See* **Norris,** Thaddeus.

——— and fishing boats. *See* **Holdsworth,** E. W. H.

——— Manuel du pêcheur. *See* **Pesson-Maisonneuve. 87 Manuels Roret.**

Fiske, John. Case of Brooks et al. vs. Fiske and Norcross. *See* Brooks, A. L.

FISTULA, Vesico-vaginal. *See* **Emmet,** Thomas A.

Fitch, Asa. 1st and 2d report on the noxious, beneficial and other insects of the state of New York. 8°. *Albany*, 1856.

Fitch, George W. Outlines of physical geography. 12°. *New York*, 1855.

Fitch, John. The original steamboat supported; or, a reply to James Rumsey's pamphlet, showing the true priority of J. Fitch and the false datings of J. Rumsey. [With a chart of Collect Pond and its vicinity in New York, in 1793, by J. Hutchings.] 8°. *Philadelphia*, 1788.

——— Life of. *See* **Westcott,** J.

Fitch, Samuel Sheldon. Six discourses on the functions of the lungs; on the laws of life, etc. 12°. *New York*, 1852.

Digitized by Google

Fitch, Samuel Sheldon. Six lectures on the uses of the lungs; the causes, prevention, and cure of pulmonary consumption, asthma, and diseases of the heart; and on the laws of longevity. 12°. *New York*, 1847.

Fitz-Gerald, Desmond G. The electrician; ed. by. *See* **Electrician.**

Fitzgerald, W. N. P. Review of the pamphlet of Fitzgerald in opposition to the extension of the patent of O'Hussey. *See* **Review.**

Fitzgibbon, William. The mine of wealth, and guide for the million; containing the secret system, and instructions for the manufacture of wines, liquors, cordials, and bitters. 8°. *Philadelphia*, 1867.

FIUME. Az Árapály a Fiumei Öbölben. *See* **Stahlberger,** Emil.

Fix, Ant., **Goldschmidt,** S., and **Richter,** Carl. Tapezierarbeiten. Schuhwaaren. Schmuckfedern. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 6.**

Flachat, Eugène, **Barrault,** A., and **Petiet,** J. Traité de la fabrication de la fonte et du fer, envisagée sous les rapports chimique, mécanique et commercial. 3e partie. 4°. *Liége*, 1851–52.

——— and **Petiet** J., The student's guide to the locomotive engine; a description of the different modes of constructing locomotives; details of their component parts, and the nature of their employment; with observations on their management; appended is a French-English vocabulary of technical terms used in engineering; a comparison of French and English weights and measures. *Illus.* 8°. *London*, 1849.

——— ——— **Lechatelier,** Louis, and **Polonceau,** C. Handbuch für Locomotiven-Führer. Aus dem Französischen von Carl Hartmann. *Illus.* 2 B. [B. 1 is the 2d ed.] 8°. *Weimar*, 1846–52. **127, 192 Neuer Schauplatz der Künste.**

FLAG of the United States, History of the. *See* **Hamilton,** Schuyler.

Flagg, Edmund. Commercial relations of the United States with foreign nations. *See* UNITED STATES. **Commerce.**

Flagg, William J. Three seasons in European vineyards; treating of vine culture, vine disease and its cure, wine-making and wines, red and white; wine-drinking as affecting health and morals. 12°. *New York*, 1869.

Flagg, William J.—Continued.

Flamm, Pierre. Guide pratique du constructeur d'appareils économiques de chauffage pour les combustibles, solides et gazeux. 12°. *Paris*, 1864.

——— Le verrier du XIX^e^ siècle; ou enseignement théorique et pratique de l'art de la vitrification tel qu'il est pratiqué de nos jours. 8°. *Paris*, 1863.

Flamsteed, John. A letter concerning earthquakes, written in the year 1693; on occasion of the destruction of Catania, and many other cities, towns and villages in Sicily, in the year 1692. 8°. *London*, 1750. pp. 20.

Flattich, Wilhelm, **Ludwig,** Bernh., and **Kohn,** Carl. Bautischlerei. Möbeltischlerei. Korbflechterei. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 8.**

FLAX and hemp. Flachs- und Hanfindustrie. Von Carl v. Oberleithner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— congress, International. Internationaler Congress der Flachs-Interessenten. Von R. A. v. Hohenbruck. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— The cultivation of. *See* **Warnes,** John.

——— culture. Flachscultur und Flachsbereitung. *See* **Schubarth,** Heinrich.

——— Elemente der Maschinen-Flachs-Spinnerei. *See* **Choimet,** N. **128 Neuer Schauplatz der Künste.**

——— Improved mode of cultivation and management. *See* **Dickson,** James H.

——— Industrie linière. *See* **Mâreau,** Théodore.

——— its cultivation and preparation. *See* **Ward,** James.

——— Lecture on. *See* **Wilson,** John.

——— spinning. Spinnerei-Industrie. *See* **Ramming,** Hermann. **281 Neuer Schauplatz der Künste.**

——— Traité de la culture du lin. *See* **Demoor,** V. P. G.

Fleck, Hugo. Die Fabrikation chemischer Producte aus thierischen Abfällen. *Illus.* 8°. *Braunschweig*, 1862.

Digitized by Google

FLEET tactics under steam. *See* **Parker,** Foxhall A.

Fleischer, Emil. Die Filtrirmethode, als selbstständige quantitative Analyse. 8°. *Leipzig,* 1871.

——— Kurzgefasstes Lehrbuch der Massanalyse. 8°. *Leipzig,* 1867.

Fleischinger, A. F., and **Becker,** W. A. Der Backstein-Rohbau in seinem ganzen Umfange. fol. *Berlin,* 1862.

Fleischmann, C. L. Erwerbszweige, Fabrikwesen und Handel der Vereinigten Staaten von Nordamerika; mit besonderer Rücksicht auf deutsche Auswanderer. 8°. *Stuttgart,* 1850.

——— Der nordamerikanische Landwirth. Ein Handbuch für Ansiedler in den Vereinigten Staaten. 8°. *New York,* 1848.

Fleming, Alexander. An inquiry into the physiological and medicinal properties of the aconitum napellus; with observations on other species of aconitum. 8°. *London* 1845.

Fleming, G. Practical horseshoeing. 8°. *New York,* 1873.

Fleming and **Tibbins.** Royal dictionary, English and French; French and English. T. 1. Anglais et Français; T. 2. Français Anglais. 4°. *Paris,* 1845–46.

FLETA minor. The laws of art and nature in knowing, judging, assaying, fining, refining, and inlarging the bodies of confined metals. *See* **Pettus,** *Sir* John.

Fletcher, Thomas C. Scientific farming made easy; or, the science of agriculture reduced to practice. 2d ed. 16°. *London,* 1861.

Flinsch, Ferdinand. Das Handlungshaus F. Flinsch. Gedenkbuch zu dessen fünfzigjähriger Jubelfeier am 20. April 1869. *See* **Süs,** F. W.

Flint, Austin. Compendium of percussion and auscultation; and of the physical diagnosis of diseases affecting the heart and lungs. 4th ed. 24°. *New York.* pp. 36.

——— Physical exploration and diagnosis of diseases affecting the respiratory organs. roy. 8°. *Philadelphia,* 1856.

——— The physiology of man: designed to represent the existing state of physiological science, as applied to the functions of the human body. Part 1. Introduction, the blood, circulation, respiration. 2. Alimentation, digestion, absorption, lymph and chyle. 3. Secretion, excretion, ductless glands, nutrition, animal heat, movements, voice and speech. 4. Nervous system. 5. Special senses, generation. 5 v. 8°. *New York,* 1866–75.

Flint, Austin—Continued.

——— Treatise on the principles and practice of medicine, for the use of practitioners and students. 3d ed. 8°. *Philadelphia,* 1868.

Flint, Charles L. Insects injurious to vegetation; ed. by *See* **Harris,** T. W.

——— Milch cows and dairy farming; comprising the breeds, breeding and management, in health and disease, of dairy and other stock; selection of milch cows, with an explanation of Guenon's method; culture of forage plants and the production of milk, butter and cheese; embodying recent improvements, and adapted to farming in the United States and the British provinces. With a treatise on the dairy husbandry of Holland; to which is added Horsfall's system of dairy management. *Illus.* 8°. *New York,* 1858. New ed., 1867.

——— A practical treatise on grasses and forage plants: comprising their natural history; comparative nutritive value; methods of cultivating, cutting, and curing; and the management of grass lands. 8°. *New York,* 1857. Also 4th ed., 1859.

FLOORS. Fuss- und Parquetböden im Farbendruck. *See* **Glink,** L.

FLORA Americæ Septentrionalis. *See* **Pursh,** Frederick.

——— Carolinæensis. *See* **Shecut,** John L. E. W.

——— Caroliniana. *See* **Walter,** Thomas.

——— Cestrica. *See* **Darlington,** William.

——— Columbiana, A prodromus of the. *See* **Brereton,** John A.

——— Deutschlands Flora. *See* **Petermann,** W. L.

——— The fossil flora of the western territories. *See* UNITED STATES. **Interior dept.** Geolog. survey. F. V. Hayden.

——— of North America. *See* **Barton,** William P. C.

FLORENCE. Rapporto generale della publica esposizione dei prodotti naturali e industriali della Toscana fatta in Firenze nel Novembre 1850. 8°. *Firenze,* 1851. Also, Rapporto, 1854.

Digitized by Google

FLORICULTURE, Practical. *See* **Henderson**, Peter.

FLORIST'S directory, The villa and cottage. *See* **Main**, James.

FLORULA Bostoniensis. A collection of plants of Boston and its environs. *See* **Bigelow**, Jacob.

FLOUR. Die Mehlfabrikation. *See* **Kick**, Friedrich.

——— Mehl, Mehlfabrikate, Müllerei- und Bäckerei-Maschinen. Von Friedrich Kick. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

——— mill. Rapport sur un moulin à blé. *See* **Humblat-Conté.**

FLOWER garden directory, American. *See* **Beust**, Robert.

——— painting. *See* **Burgess**, John Carl.

FLOWERS and feathers, Artificial. Schmuckfedern, künstliche Blumen. Von Carl Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 6.**

——— Artificial. Die Fabrication der künstlichen Blumen. *See* **Schreiber**, E. **219 Neuer Schauplatz der Künste.**

——— ——— Manuel du fleuriste artificiel. *See* **Celnart**, *Mme.* **88 Manuels Roret.**

——— Les fleurs de pleine terre. *See* **Vilmorin-Andrieux.**

——— Garden. *See* **Rand**, Edward Sprague.

——— paper, Art of making. *See* **Bartlett**, *Mrs.*

——— Wax. *See* **Wax** flowers.

FLUCTUATIONS of level in the North American lakes. By C. Whittlesey. **Smiths'n contrib., v. 12.**

Fludd, Robertus, alias de Fluctibus armigerus et M. D. Oxoniensis. Utrius cosmi majoris scilicet et minoris metaphysica, physica, atque technica historia. In duo volumina secundum cosmi differentiam divisa. fol. *Francofurti*, 1621.

Flügel, Johann Gottfried. A complete dictionary of the English and German languages. Part 1. English-German. Part 2. German-English. 3d ed. 2 v. 8°. *Leipsic*, 1847.

FLUIDS, Mechanics of. *See* **Jamieson**, A.

——— Résistance des fluides. *See* **Alembert**, J. Le R. d'; **Condorcet**, J. M. de C. de, and **Bossut**, C.

FLUTE, An illustrated history of the. *See* **Badger**, A. G.

FLUXIONS, An introduction to the doctrine of. *See* **Rowe**, John.

Focke, Gustav Waldemar. Die Krankheit der Kartoffeln im Jahre 1845. 4°. *Bremen*, 1846.

Fodell, William P. A system for keeping the histories and accounts of gas-light companies. 8°. *Philadelphia*, 1869.

Foetterle, Franz. Mittheilungen der k. k. geographischen Gesellschaft; red. v. *See* VIENNA.

——— Das Vorkommen, die Production und Circulation des mineralischen Brennstoffes in der österreichisch-ungarischen Monarchie im Jahre 1868. 8°. *Wien*, 1870.

Fol, Frédéric. Guide du teinturier; manuel complet des connaissances chimiques indispensables à la pratique de la teinture. 12°. *Paris*, 1872.

Foley, Daniel. An English-Irish dictionary, intended for the use of students of the Irish language. 8°. *Dublin*, 1855.

Folger, R. M. Exchange tables of British sterling; showing the value in currency of one penny to ten thousand pounds. 8°. *New York*, 1849.

Folkard, H. C. The sailing boat. A treatise on English and foreign boats and yachts; descriptive of various forms of sails, rigs, etc., of the vessels of every nation; with directions for sailing and management. 4th ed. 12°. *London*, 1870.

Folsch, August. Ueber Theaterbrände und über die für das neue Operahaus in Wien getroffenen Sicherheits-Massregeln. 8°. *Wien*, 1870.

Fonda, Sebastian F. Analysis of the Sharon waters, Schoharie county; also of Avon, Richfield, and Bedford mineral waters: with directions for invalids. 12°. *New York*, 1854.

Fontenay, de. Manuel pratique des constructions rustiques. 18°. *Paris*, 1836. **72 Manuels Roret.**

Fontenay (Toni-). Die Construction der Viaducte, Aquäducte und der Brücken von Mauerwerk; Beschreibung des Indre-Viaducts und des Verfahrens bei dessen Bau, Beschreibung der merkwürdigeren steinernen Viaducte, Aquäducte, etc., in Frankreich, England, Deutschland, etc. Aus dem Französischen des Toni Fontenay übersetzt und mit Zusätzen bereichert von A. W. Hertel. 11 lithographirte Tafeln und 6 Tabellen. l. 4°. *Weimar*, 1856.

Digitized by Google

Fontenelle, Julia de. *See* **Julia de Fontenelle, J. S. E.**

FOOD. Abridgments English Patents, No. 4.

——— and diet, A treatise on. *See* **Pereira** Jonathan.

——— and drink, The adulteration of. *See* **Byrn, M. L.**

——— and its digestion. *See* **Brinton,** William.

——— Art de la conservation des substances alimentaires. *See* **Martin,** E. **Encyclopédie populaire, v. 8.**

——— By H. E. Armstrong. **Science lectures for the people, series 7.**

——— Chemistry of. *See* **Liebig,** J. v.

——— Chemistry of. By J. Moleschott. *See* **Gore,** G. **Orr's circle of the sciences, v. 7.**

——— Falsification des substances alimentaires. *See* **Garnier,** J. J., and **Harel,** C.

——— Falsifications of. *See* **Mitchell,** J.

——— Good food and how to get it. **Household manuals, v. 7.**

——— Lehre der Nahrungsmittel. *See* **Moleschott,** Jacobus.

——— of animals, and fattening of cattle, Experimental researches on the. *See* **Thomson,** Robert Dundas.

——— The pantropheon. *See* **Soyer,** A.

——— Preparation of. By W. E. Johnson. *See* UNITED STATES. **State dept. Reports Paris exp. v. 5.**

——— The preservation of food, Abstracts of English and colonial patents for. *See* **Archer,** W. H.

——— Substances used as. By J. Lindley. *See* **Lectures** on the results of the exhibition.

——— Traité des alimens. *See* **Gautier,** A. **Encyclopédie populaire, v. 6.**

——— A treatise on the esculent funguses of England, etc. *See* **Badham,** Charles David.

——— What to eat, and how to cook it. *See* **Blot,** Pierre.

——— What we eat. *See* **Hoskins,** Thomas H.

——— Wholesome fare. *See* **Delamere,** Edmund S. and Ellen J.

FOODS. By Edward Smith. **International scientific series, No. 3.**

——— of all sorts, A treatise of. *See* **Lemert,** M. L.

FOOT, and its covering (The). *See* **Dowie,** J.

Forbes, *Major.* Eleven years in Ceylon: comprising sketches of the field sports and natural history of that colony; and an account of its history and antiquities. 2 l ed. 2 v. 8°. *London,* 1841.

Forbes, Edward. Physical atlas, by. *See* **Johnston,** A. K.

——— Zoology and botany in the Crystal palace. *See* **Latham,** R. G. **Crystal palace library, v. 3.**

Forbes, James D. Physical atlas, by. *See* **Johnston,** A. K.

Forbes, John. The cyclopædia of practical medicine: comprising treatises on the nature and treatment of diseases, materia medica, therapeutics and medical jurisprudence. Ed. by John Forbes, Alexander Tweedie, John Conolly. Rev. with additions by Robley Dunglison. 4 v. 8°. *Philadelphia,* 1854.

Force, Peter. Record of auroral phenomena in higher northern latitudes. **Smiths'n contrib., v. 8.**

FORCE and nature. *See* **Winslow,** Charles F.

FORCES. The applications of physical forces. *See* **Guillemin,** Amédée.

——— Correlation and conservation of, etc. *See* **Grove,** William Robert.

——— Correlation of physical. *See* **Grove,** W. R.

——— of nature (The). *See* **Guillemin,** Amédée.

FOREIGN bodies in the air passages. *See* **Gross,** S. D.

Forester, Frank [*pseud.*]. The dog. *See* **Dinks, Mayhew,** and **Hutchinson.**

——— Horse and horsemanship of U. S. *See* **Herbert,** H. W.

FORESTER'S guide (The). *See* **Monteath,** Robert.

Foresti, Felix. Ollendorff's new method of learning to read, write and speak the Italian language: adapted for the use of schools and private teachers. 12°. *New York,* 1844.

FORESTRY. Forstwirthschaft. Von Johann Newald. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

FORESTS. Bericht über die Versammlung deutscher Land- und Forstwirthe. *See* GERMANY. **Versammlung.**

——— The culture of. *See* **Emmerich,** A.

——— The forest tree culturist. *See* **Fuller,** Andrew S.

Digitized by Google

FORESTS. Waldwirthschaft und Holzzucht. *See* **Wohlgemeinte** Andeutungen.

FORGERY, Report of the commission of the society of arts relative to. *See* LONDON. **Society** of ar s.

——— Security against. *See* **Congreve**, *Sir* W.

FORM book, American. *See* **American** form book.

FORMS, A book of. *See* **Dunlap**, James D.

——— Imposition of. *See* **Bidwell**, G. H.

FORMULARY, American medical. *See* **Reese**, J. J.

——— Medical. *See* **Beasley**, H.

——— ——— *See* **Ellis**, B.

——— Universal medical. *See* **Griffith**, R. E.

——— Veterinary. *See* **Beasley**, H.

FORMULÆ for making tinctures, etc. *See* Tilden and co.

——— Non-officinal formulæ in local use. *See* WASHINGTON.

Forrest, James. National defences; ed. by. *See* **Bidder**, G. P., *jr.*

Forrest, R. Illustrated handbook of military engineering and of the implements of war. Pl. 20. 8°. *London*, 1856. pp. 23.

Forrester, George, and co. Steam navigation: appendixes "A" and "B" by. *See* **Tredgold, T. Steam** navigation.

Forster, John. Lives of British statesmen. *See* **Mackintosh**, *Sir* J. **Lardner's cabinet cyclopædia, v. 76-82.**

Forster, Leopold. Thierärztliche Instrumenten- und Verbandlehre. *Illus.* 8°. *Wien*, 1861.

Forster, Simon Andrew. History of the violin. *See* **Sandys**, W.

Forthomme, C. Traité élémentaire de physique expérimentale et appliquée. T. 1. Pesanteur; hydrostatique; chaleur. T. 2. Acoustique; magnétisme; électricité statique; électricité voltaïque; optique. 2 v. 12°. *Paris*, 1860.

Fortia D'Urban, de. Principes des sciences mathématiques contenant des élémens d'arithmétique, d'algèbre, de géométrie et de mécanique. 24°. *Paris*, 1841.

Fortnightly review (The). Edited by George Henry Lewes. v. 1-7, 1865-66. New series, v. 1-21, 1867-76. 8°. *London*, 1865-76——.

Fortnum, C. Drury E. Maiolica; fine pottery. *Illus.* 8°. *New York*, 1876.

Fortnum, C. Drury E.—Continued. **South Kensington museum, Art and science handbooks, No. 4.**

Fortschritte (Die) auf dem Gebiete der technischen Chemie. No. 1, 1874-1876. (Separat-Ausgabe aus der Vierteljahres-Revue der Naturwissenschaften, hrsg. von Dr. Hermann J. Klein.) sm. 8°. *Köln und Leipzig*, 1877.

Fortune, Robert. A journey to the tea countries of China, including Sung Lo, and the Bohea hills; with a notice of the East India company's tea plantations in the Himalaya mountains. *Illus.* 8°. *London*, 1852.

——— A residence among the Chinese: inland, on the coast and at sea; a narrative of scenes and adventures during a third visit to China, from 1853 to 1856; including notices of natural productions and works of art, the cultivation of silk, etc.; with suggestions on the present war. *Illus.* 8°. *London*, 1857.

——— Three years' wanderings in the northern provinces of China, including a visit to the tea, silk and cotton countries: an account of the agriculture, horticulture, new plants, etc. 2d ed. *Illus.* 8°. *London*, 1847.

FORTUNE-teller, The unerring. *See* **Le Normand,** *Madame.*

Fosbrooke, Thomas Dudley. A treatise on the arts, manufactures, manners and institutions of the Greeks and Romans. 2 v. 16°. *London*, 1833-35. **Lardner's cabinet cyclopædia, v. 45, 46.**

FOSSILS. Fossil flora, Report on, by L. Lesquereux. *See* UNITED STATES. **Interior** dept. Geolog. survey. F. V. Hayden.

——— Invertebrate cretaceous and tertiary, of the upper Missouri. By F. B. Meek. *See* UNITED STATES. **Interior** dept. Geolog. survey. F. V. Hayden.

Foster, B. F. A concise treatise on commercial book-keeping. 8°. *Boston*, 1836.

Foster, J. W. The Mississippi valley: its physical geography, including sketches of the topography, botany, climate, geology, mineral resources, and the progress of development in population and material wealth. 8°. *Chicago*, 1869.

——— Report on the Lake Superior land district. *See* UNITED STATES. **Interior** department.

Digitized by Google

Foster, M., and **Balfour,** Francis M. Elements of embryology. 12°. *London,* 1874.

Foucher, Paul. Littérature et beaux-arts. *See* **Écho** de la littérature.

Fougeraux d'Angerville. Art du criblier. PARIS. **Acad. des sc., arts et métiers, v. 33; also v. 14.**

Fougeraux de Bondaroy, Auguste Denis. Art du coutelier en ouvrages communs. PARIS. **Acad. des sc., arts et métiers, v. 11 and v. 14.**

——— Art de tirer des carrières la pierre d'ardoise. PARIS. **Acad. roy. des sc., arts et métiers, v. 14; also v. 4.**

——— Art du tonnelier. PARIS. **Acad. roy. des sc., arts et métiers, v. 19; also v. 7.**

——— Art de travailler les cuirs dorés ou argentés. PARIS. **Acad. des sc, arts et métiers, v. 38; also v. 3.**

FOUILLEUSE. Concours international de machines à moissonner tenu sur le domaine impérial de Fouilleuse les 19, 20 et 21 juillet 1859. Rapport du jury, suivi de la description et des gravures des machines primées. 8°. *Paris,* 1860.

FOUNDATIONS under water. **Weale's Papers on engineering, v. 6.**

——— Papers on. By T. Hughes. *See* **Weale, J. Theory of bridges, v. 1.**

FOUNDERY. Founder's guide. *See* **Overmann,** F.

——— Hütten-Erzeugnisse. *See* **Leonhard,** K. C. v.

FOUNTAINS. Art du fontainier. Par C. M. de la Gardette. PARIS. **Acad. roy. des sc., arts et métiers, v. 7 and 13.**

——— Brunnen- und Wasserleitungen. *See* **Petermann,** C.

——— Konstruktion der Pumpen, Brunnenanlagen, etc. *See* **Hoelden,** Georg. **280 Neuer Schauplatz der Künste.**

Fonquet. Traité élémentaire des engrais et amendements. T. 1-2 [bound in 1]. 12°. *Bruxelles,* 1851-55.

Four old plays. Three interludes: Thersytes, Jack Jugler and Heywood's Pardoner and frere; and Jocasta, a tragedy by Gascoigne Kinwelmarsh. 8°. *Cambridge,* 1848.

Fourcault, Feréol. Le canon prussien jugé par les Allemands. 8°. *Paris,* 1861. pp. 36.

Fourcault, Feréol. Le canon rayé prussien: comparaison des systèmes français et prussien. 8°. *Paris,* 1861.

Fourcroy de Ramecourt, Charles René. Art du chaufournier, par. PARIS. **Acad. roy. des. sc., arts et métiers, v. 1 and 4.**

——— Art du tuilier et du briquetier. PARIS. **Acad. roy. des sc., arts et métiers, v. 14 and 4.**

Fourier, Joseph. Biography. *See* **Arago,** D. F. J. **Biography** of scientific men.

Fournel, J. Die Zimmeröfen und Zimmercamine, etc. Nach dem Französischen frei bearbeitet und vermehrt von Alexander Schultz. *Illus.* 8°. *Weimar,* 1846. **150 Neuer Schauplatz der Künste.**

Fournier, Édouard. L'art de la reliure en France, aux derniers siècles. 12°. *Paris,* 1864.

Fournier, Fr. Ign. Nouveau dictionnaire portatif de bibliographie, etc. 8°. *Paris,* 1809.

Fowle, William Bentley. The eye and hand: a series of practical lessons in drawing for the training of those important organs. 18°. *Boston,* 1847.

——— Fables in the French language for the use of beginners; with a dictionary containing every word in the book with its pronunciation. 18°. *Boston,* 1856.

——— The teachers' institute; or, familiar hints to young teachers. 8°. *New York,* 1867.

Fowler, Charles, *jr.* The Crystal palace: its architectural history. *See* **Berlyn,** P.

Fowler, Orin S. A home for all; or, the gravel wall and octagon mode of building. 12°. *New York,* 1857.

Fowler, William C. English grammar. The English language in its elements and forms; with a history of its origin and developments. roy. 8°. *New York,* 1855.

FOWLS. *See* **American** fowl breeder.

——— The art of hatching and bringing up domestic fowls. *See* **De Reaumur,** M.

——— Domestic and ornamental. *See* **Saxton's rural hand books, v. 3.**

——— Éleveur des oiseaux de basse-cour, etc. *See* **Millet-Robinet,** *Mme.* Cora.

——— Die praktische Hühnerzucht. *See* **Oettel,** Robert.

Fownes, George. Elementary chemistry, theoretical and practical. Ed. by Robert Bridges. New American from last Lon-

Digitized by Google

Fownes, George—Continued.
don ed. 8°. *Philadelphia*, 1853. Same, from 10th English ed. 12°. *Philadelphia*, 1869.

Fox, Charles. Legal advice and instruction to business men, on the purchase and sale of goods by merchants and brokers; on common carriers; on general and limited partnerships; promissory notes, and bills of exchange. 12°. *Cincinnati*, 1869.

Fox, Joseph. The natural history of the human teeth; particularly of the changes which take place during the second dentition. 4°. *London*, 1803.

Fraas. Die künstliche Fischerzeugung nach den Erfahrungen der künstlichen Fischzuchtanstalt des General-Comité des landwirthschaftlichen Vereins von Bayern, etc. 2te Aufl. 8°. *München*, 1854. pp. 84. [2 copies.]

Fraas, C. Die Schule des Landbaues. 8°. *München*, 1852.

FRACTURES and dislocations. *See* **Hamilton,** F. H.

——— of the lower extremities, Treatment of. *See* **Smith,** N. R.

——— A treatise on. *See* **Malgaigne,** J. F.

FRAGMENTS of science for unscientific people. *See* **Tyndall,** John.

FRAMES, Ornamental, for looking glasses, etc. *See* Kingsland, Richards, and co.

FRANCE. Aide-mémoire à l'usage des officiers d'artillerie. 2e éd. 8°. *Paris*, 1844.

——— Almanach des 500,000 adresses de Paris, des départements, etc. *See* **Didot,** Firmin.

——— ancienne et moderne, morale et matérielle. *See* **Aicard,** J.

——— Bibliographie de la. *See* **Bibliographie.**

——— Catalogue annuel de la librairie française. *See* **Reinwald,** C.

——— Commission de pisciculture. Travaux et rapports de MM. Milne-Edwards et Coste. 8°. *Paris, n. d.*

——— Commission française sur l'industrie des nations. Exposition universelle de 1851. Travaux. T. I, P. 1, 2, 5. T. III, P. 1, section 1, 2, P. 2. T. IV-VIII. [Bound in 9 vols. Each section separately paged.] 8°. *Paris*, 1854-58.

——— Conseil supérieur de l'agriculture, du commerce et de l'industrie.—Enquête—Traité de commerce avec l'Angleterre—Industries textiles; chanvre, jute et lin; soie et soieries; tissus de crin et de caoutchouc; et vêtements confectionnés. fol. *Paris*, 1861.

——— Département de la Seine. La boulangerie. 2e rapport sur les commerces du blé, de la farine et du pain. Par M. F. Le Play. 8°. *Paris*, 1860.

——— Détails sur les produits de l'imprimerie impériale. *See* **Escodeca de Boisse.**

——— Documens sur le commerce extérieur. janv. 1846 à déc. 1847. 4 v. 8°. *Paris. n. t. p.*

——— Enquête sur les moyens d'assurer la régularité et la sûreté de l'exploitation sur les chemins de fer; publiée par ordre du ministère de l'agriculture, du commerce et des travaux publics. 4°. *Paris*, 1858.

——— État du drainage en France. *See* **Straten-Ponthoz,** F. van der.

——— French and American tariffs compared. *See* **Carey,** H. C.

——— French patent law. By C. Egan. **Weale's papers on engineering, v. 4.**

——— History of. *See* **Crowe,** E. E. **Lardner's cabinet cyclopædia, v. 19-21.**

——— Instructions pratiques sur le drainage, etc. 12°. *Paris*, 1855.

——— International copyright between England and. *See* **Burke,** P.

——— Law and practice of patents for inventions. *See* **Perpigna,** A.

——— La France littéraire. Dictionnaire bibliographique. *See* **Quérard,** J. M.

——— Lives of scientifique and literary men of. *See* **Shelley,** M. W. **Lardner's cabinet cyclopædia, v. 91, 92.**

——— Ministère de l'agriculture, du commerce et des travaux publics. Annuaire. Annales des ponts et chaussées. Lois, ordonnances et autres actes concernant l'administration des ponts et chaussées. 1e série, T. 1-10, 1831-40. 2e série, T. 1-10, 1841-50. 3e série, T. 1-9, 1851-59. 8°. *Paris*, 1831-59.

——— ——— ——— ——— Mémoires et documents relatifs à l'art des constructions, et du service de l'ingénieur; lois, ordonnances et autres actes concernant l'administration des ponts et chaussées. 1e série, T. 1-20, 1831-40. 2e série, T. 1-20, 1841-50. 3e série, T. 1-18, 1851-59. T. 1-4, plates. 8°. *Paris*, 1831-59.

Digitized by Google

FRANCE. Ministère de l'agriculture, du commerce et des travaux publics. Exposition universelle, 1867. Notices sur les collections, cartes et dessins relatifs au service du corps impérial des mines. 8°. *Paris*, 1867.

——— ——— ——— Notices sur les modèles, cartes et dessins relatifs aux travaux publics. roy. 8°. *Paris*, 1867.

——— Ministère de l'intérieur, de l'agriculture, etc. Catalogue des brevets d'invention, importation et de perfectionnement, délivrés 1er janvier 1828 au 31 décembre 1863. 22 v. 8°. *Paris*, 1847–64. *See also* **Patents.**

——— ——— Catalogue des spécifications de tous les principes, moyens et procédés pour lesquels il a été pris des brevets d'invention, de perfectionnement et d'importation, depuis 1r juillet 1791, et indiquant les spécifications: 1°. des titres de ce genre qui ont été délivrés; 2°. de ceux qui ont été cédés en tout ou en partie; 3°. de ceux dont la déchéance a été prononcée; 4°. de ceux dont la durée est expirée; 5°. de ceux qui ont été rendus publics, pendant la même période. T. 1, juillet 1r 1791–juillet 1r 1825. Supplément, T. i–v, 1825–28; T. vi–viii, 1829–33; T. ix–xi, 1833–35; T. xii–xiii, 1836–37; T. xiv, 1838; T. xv, 1839; T. xvi, 1840. 8°. *Paris*, 1826–40. *See also* **Patents.**

——— ——— Descriptions des machines et procédés consignés dans les brevets d'invention, de perfectionnement et d'importation dont la durée est expirée, et dans ceux dont la déchéance a été prononcée; et des brevets d'invention qui ont été pris sous le régime de la loi du 5 juillet 1844; publiées par les ordres de M. le ministre de l'agriculture, du commerce et des travaux publics. 1e série, T. 1–93, 1791–1844. Texte, 4°; pl., fol. *Paris*, 1811–63. 2e série, sous le régime de la loi du 1844, T. 1–84, 1844–62——. Texte, 4°; pl., fol. *Paris*, 1850–76——. 3e série, T. 1–8, 1871–73. Texte et pl., 4°. *Paris*, 1873–76——. [With manuscript index in English.] [In all these series, the plates are bound separately, 2 v. in 1, in 1st ser.] *See also* **Patents.**

——— Ministère de l'intérieur, de l'agriculture, etc. Descriptions des machines et procédés consignés dans les brevets d'invention. Tables générales: 1e série, tables des 40 premiers volumes. 2e série, table générale (loi de 1844) des 20 premiers volumes. 2e série, table générale (loi de 1844) des tomes 21–40. 2e série, table générale (loi de 1844) des tomes 61–79. 4°. *Paris*, 1843–73——.

FRANCE—Continued.

——— ——— État général, par ordre alphabétique, des brevets d'invention, de perfectionnement et d'importation, délivrés en vertu des lois des 7 janvier et 25 mai 1791 jusqu'au 1 janvier 1812. *Paris. n. t. p.*

——— Ministère des travaux publics, de l'agriculture et du commerce. Direction générale des ponts et chaussées. Exposé général des études faites pour le tracé des chemins de fer de Paris en Belgique et en Angleterre, et d'Angleterre en Belgique, desservant, au nord de la France, Boulogne, Calais, Dunkerque, Lille et Valenciennes; présenté par L. L. Vallée. *Illus.* 4°. *Paris*, 1837.

——— ——— Direction générale des ponts, des chaussées et des mines. Mémoire sur le projet d'un chemin de fer de Lyon à Marseille. Par M. F. Kermaingant. *Illus.* 4°. *Paris*, 1837.

——— ——— ——— Mémoire sur le projet d'un chemin de fer de Paris à Orléans. Par M. Defontaine. *Illus.* 4°. *Paris*, 1837.

——— ——— ——— Mémoire sur le projet d'un chemin de fer de Paris à Rouen; au Havre et à Dieppe. Par M. Defontaine. *Illus.* 4°. *Paris*, 1837.

——— Nouveau code des patentes contenant la loi de 25 avril 1844, annotée, article par article, des motifs qui l'ont fait adoptée, des discussions dont elle a été l'objet; les instructions données pour son exécution avec les modèles d'états qui les accompagnent; le tarif général des droits des patentes. 8°. *Paris*, 1844.

——— Nouveau manuel de géographie physique, historique et topographique de la France. *See* **Loriol, V. A. 13 Manuels Roret.**

——— Patent and copyright laws in. *See* **Annales de la propriété industrielle.**

——— Société impériale et centrale d'agriculture et d'économie rurale et domestique. Bulletin du compte-rendu mensuel. Rédigé par M. Payen. [During the years 1847–52, the society is termed "nationale et centrale"; 1852–67, "impériale et centrale"; from 1868, "centrale".] 2e série, T. 2–5, 1846–49; 3e série, T. 3–7, 1857–72. 8°. *Paris*, 1868–72.

Digitized by Google

FRANCE. La société impériale et centrale d'horticulture, Journal de. Napoléon III, protecteur. T. 5–9, 1859–63. 8°. *Paris*, 1859–63.

——— Vues des monumens français. *See* **Reville, Lavallée,** and **Roquefort,** B. de.

Francis, Francis. Fish-culture; a practical guide to the modern system of breeding and rearing fish. *Illus.* sm. 8°. *London and New York*, 1863.

Francis, G. W. The dictionary of the arts, sciences, and manufactures. *Illus.* 8°. *London*, 1842.

Francis, J. B. Example of the turbine wheel. *See* **Tredgold,** T. **Steam engine, 2d series,** v. 3.

Francis, James B. Lowell hydraulic experiments; a selection from experiments on hydraulic motors, on the flow of water over weirs, and in canals of uniform rectangular section and of short length. Made at Lowell, Mass. 4°. *Boston*, 1855.

——— and **Baldwin,** J. F. Report to the directors of the proprietors of the locks and canals on the Merrimack river; on the measurement of the water power used by the manufacturing companies at Lowell. 4°. *Boston*, 1853. pp. 20.

Francis, John. A history of the English railway: its social relations and revelations, 1820–1845. v. 1–2. 8°. *London*, 1851.

Francis, Samuel W. Biographical sketches of distinguished living New York physicians. 12°. *New York*, 1867.

Francis, William. Chemical gazette; conducted by. *See* **Chemical gazette.**

——— History of inventions, etc.; ed by. *See* **Beckmann,** J.

Francœur. Manuel du menuisier; les principes du dessin, par. *See* **Nosban. 47 Manuels Roret.**

Francœur, Louis Benj. Uranographie; ou, traité élémentaire d'astronomie, accompagné de planisphères. 8°. *Paris*, 1812.

Frank Leslie's ladies' gazette of fashion. v. 1–6. 4°. *New York*, 1854–56.

Franke, C. A. Handbuch der Buchdruckerkunst. 8°. *Weimar*, 1855. **220 Neuer Schauplatz der Künste.**

Franke, *Prof.* T. Technological dictionary: containing the technical terms used in manufactures and arts; building; civil and naval architecture; military, civil and mechanical engineering; artillery; navigation; mathematics and natural philosophy; chemistry and mineralogy; etc. v. 2. English-German-French. 4°. *Wiesbaden*, 1855. *See* **Beil,** J. A.

Fränkel, Wilhelm, and **Heyn,** Rudolf. Atlas des Bauwesens. 19 Tafeln in Stahlstich nebst erläuterndem Texte. fol. *Leipzig*, 1874.

FRANKFORD, PA. Directory for 1855. *See* **McElroy,** A. **Philadelphia** directory.

FRANKFORT. Jahresbericht des physikalischen Vereins zu Frankfurt am Main. 8°. *n. p., n. d.* [This set contains the reports for 1846–47, 1853–54.]

Frankland, Edward. Lecture notes for chemical students; embracing mineral and organic chemistry. 8°. *London*, 1866.

Franklin, Benjamin. Life; written by himself; to which is added his Miscellaneous essays. 12°. *Auburn*, 1851.

——— Life and times of. *See* **Parton,** James.

——— New experiments and observations on electricity made at Philadelphia in America. 2d ed. sm. 4°. *London*, 1754.

Franklin, *Sir* John, Discovery of the fate of. *See* **McClintock,** F. L.

FRANKLIN institute of Pennsylvania, Journal of the, and American mechanics' magazine, devoted to useful arts, internal improvements and general science. 1st series, v. 1–3, 1826–27 [called the Franklin journal]. 2d series, v. 1–26, 1828–40. 3d series, v. 1–72, 1841–76. [MSS. index, 1826–68, 4 v.] 8°. *Philadelphia*, 1826–76 ——.

Franklin journal and American mechanics' magazine; devoted to the useful arts, internal improvements and general science. Under the patronage of the Franklin institute of Pennsylvania. Ed. by Thomas P. Jones. v. 1–3. [v. 4 missing. Continued as Journal of the Franklin institute.] 8°. *Philadelphia*, 1826–27. *See, also,* **Franklin** institute.

Franks, Augustus Wollaston. A book of ornamental glazing quarries, collected and arranged from ancient examples. *Illus.* 8°. *London and Cambridge*, 1849. pp. 27.

Franque, J. B. von. Medicinische Jahrbücher; hrsg. v. *See* NASSAU.

Digitized by Google

Franquoy, J. De la fabrication des combustibles agglomérés, ou briquettes de charbon pour les usages industriels. Études sur les usines d'agglomération du bassin de Charleroy. *Liége*, 1861.

Fraser, James. A handy-book of patent and copyright law, English and foreign. 8°. *London*, 1860.

FREE libraries. Allgemeine Bildungsmittel.—Volksbibliotheken. Von Carl Th. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— ——— Report on the working of. *See* MANCHESTER, England.

——— trade. Du libre échange. *See* **Hantute.**

Freedley, Edwin T. Opportunities for industry, and the safe investment of capital, or a thousand chances to make money. 4th ed. 12°. *Philadelphia*, 1859.

——— Philadelphia and its manufactures, a handbook exhibiting the developement, variety and statistics of the manufacturing industry of Philadelphia in 1857; sketches of remarkable manufactories; list of articles now made in Philadelphia. 12°. *Philadelphia*, 1858.

——— A practical treatise on business; or, how to get, save, spend, give, lend, and bequeath money; with an inquiry into the chances of success and cause of failure in business. 2d ed. 8°. *Philadelphia*, 1852.

Freeman, Edward A. A history of architecture. 8°. *London*, 1849.

FREEMASONRY, A cyclopedia of. *See* **Macoy,** Robert.

Freese, Jacob R. School-houses and the means of promoting popular education. *See* UNITED STATES. **State dept. Reports Paris exp. v. 5.**

Freese, John H. The commercial class-book; or, young merchants' compendium. 8°. *Baltimore*, 1849.

FREIBERG. Königliche Bergakademie. Jahrbuch für den sächsischen Berg- und Hüttenmann. [Prior to 1852, published under the name of "Kalender für den sächsischen Berg- und Hüttenmann".] Jahrg. 1852-76. 8°. *Freiberg*, 1852-76——.

——— ——— Kalender für den sächsischen Berg- und Hüttenmann. Jahrg. 1827-51. [From 1852, continued under the name of "Jahrbuch für den sächsischen Berg- und Hüttenmann".] 8°. *Freiberg*, 1827-51.

FREIBERG—Continued.

Frémont, John Charles, Life, explorations and public services of. *See* **Upham,** Charles Wentworth.

French, Benjamin B. Circuit court of the United States, eastern district of Pennsylvania. In equity. Benjamin B. French et al. vs. Henry J. Rogers et al. 2 v. v. 1. Complainant's evidence. v. 2. Respondent's evidence. With plates. 4°. *Philadelphia*, 1851.

French, Benjamin F. History of the rise and progress of the iron trade of the United States, from 1621 to 1857; with statistical tables, relating to the manufacture, importation, exportation, and prices of iron, for more than a century. 8°. *New York*, 1858.

French, Gilbert J. The life and times of Samuel Crompton. With an appendix of original documents; including a paper on the origin of spinning by rollers, read by Robert Cole. 2d ed. sm. 8°. *Manchester*, 1860.

French, J. Homer. Adams' book-keeping; prepared by. *See* **Adams,** Daniel.

FRENCH academy, Dictionary of. *See* PARIS. **Académie** des sciences.

——— ——— History of, from 1666 to 1788. *See* PARIS. **Académie** des sciences.

——— colonies in Algiers, Africa, A survey of the, 1856-1858. *See* ALGIERS.

——— course. *See* **Girard,** George.

——— domestic cookery, in twelve hundred receipts; a variety of modes for keeping and storing provisions, domestic hints and the management of wines. *Illus.* 12°. *New York*, 1846.

——— English dictionary. *See* **Collot,** A. G.

——— English dictionary. *See* **Fleming** and **Tibbins.**

——— English dictionary, Spiers and Surenne's. *See* **Spiers,** A.

——— English pronouncing dictionary. *See* **Meadows,** F. C.

——— English pronouncing school dictionary. *See* **Spiers,** A.

——— exchange, Tables for. *See* **Hansen,** Lewis G.

——— fables. *See* **Fowle,** William Bentley.

——— German dictionary. *See* **Mozin,** D. J.

——— grammar. *See* **Borel,** Eugène.

——— language, Dictionary of. *See* **Poitevin,** P.

Digitized by Google

FRENCH language. Dictionnaire de marine, à voiles et à vapeur. *See* **Bonnefoux**, *Baron* de, and **Paris.**

——— ——— Introductory course. *See* **Ahn**, F.

——— ——— Kelham's dictionary of the old. *See* **Bouvier**, J.

——— ——— A key to the correct pronunciation of. *See* **Breithof.**

——— ——— A new method of learning the. *See* **Keetels**, Jean Gustave.

——— Mezzofanti's system of. *See* **Roemer**, J.

——— nouns. *See* **Gordon**, James C.

——— ——— The gender of. *See* **Jouanne**, L. E.

——— Oral method with. *See* **Keetels**, Jean Gustave.

——— patents. Les brevets d'invention. *See* FRANCE. **Ministère** de l'intérieur, etc.

——— perfumer, The. Teaching the several ways of extracting the odours of drugs and flowers, and making all the compositions of perfumes for powder, washballs, essences, oyls, wax, pomatum, paste, queen of Hungary's "Rosa solis," and other sweet waters. From the French. 18°. *London*, 1696.

——— phrases, Vocabulary of. *See* **Falconer**, W. **Dictionary** of marine.

——— pronouncing reading-book. *See* **Arnoult**, E.

——— pronunciation. *See* **Value**, V.

——— pronunciation and genders. *See* **Lafont**, J. B. Augelvy.

FRESCO painting. *See* **Merrifield**, *Mrs.* M. P.

——— ——— Anleitung zur Frescomalerei. *See* **Hampel**, J. C. G. **147 Neuer Schauplatz der Künste.**

Frese, O. Beiträge zur Zuckerfabrikation. Eine Sammlung der wichtigsten, beim Gebrauch des Aräometers und Polarisations-Apparates, vorkommenden Tabellen. 8°. *Braunschweig*, 1863.

Fresenius, C. Remigius. Elementary instruction in chemical analysis. With a preface by Prof. Liebig. Ed. by J. Lloyd Bullock. 12°. *New York*, 1844.

——— Instructions in chemical analysis; quantitative. Ed. by J. Lloyd Bullock. 8°. *London*, 1846.

——— Précis d'analyse chimique qualitative; ou, traité des opérations chimiques, des réactifs et de leur action sur les corps les plus répandus. Éd. française sur la 3e éd. allemande. 12°. *Paris*, 1845.

——— Précis d'analyse chimique quantitative; ou, traité du dosage et de la séparation des corps simples et composés les plus usités en pharmacie, dans les arts et en agriculture. Éd. française par F. Sacc. 12°. *Paris*, 1847.

——— A system of instruction in quantitative chemical analysis, from the last English and German ed. Edited by Samuel W. Johnson. 8°. *New York*, 1870.

Fresnel, Augustin Jean, Biography of. *See* **Arago**, D. F. J. **Biography** of scientific men.

Freudenvoll, D. and F. Praktische Erfahrungen über die gesammte Firnissfabrikation nebst Angabe neuer vorzüglicher, auf kaltem Wege bereiteter spirituöser und öliger Kopalfirnisse. Mit in dem Text eingedruckten Abbildungen. 8°. *Mainz*, 1846.

Freund, Wilhelm. Latin-English lexicon founded on the Latin-German lexicon of. *See* **Andrews**, E. A.

Freuzel, J. G. Die vollkommene Linirkunst; vermehrt von. *See* **Volkommene. 41 Neuer Schauplatz der Künste.**

Frey, A. Manuel nouveau de typographie. Orné de planches. 1e-2e partie. 18°. *Paris*, 1835. **32 Manuels Roret.**

Frezier. La théorie et la pratique de la coupe des pierres et des bois; pour la construction des voûtes et autres parties des bâtimens civils et militaires; ou traité de stéréotomie à l'usage de l'architecture. T. 1-3. 4°. *Paris*, 1754-96.

Frick, Charles. Renal affections; their diagnosis and pathology. 12°. *Philadelphia*, 1850.

Frick, Georg. Die Kunst weisses Steingut anzufertigen; aus dem Französischen von. *See* **Bastenaire-Daudenart. 88 Neuer Schauplatz der Künste.**

Frick, J. Die Feuerspritze. Anleitung zu deren Bau, Berechnung, Behandlung und Prüfung. *Illus.* 8°. *Braunschweig*, 1859.

——— Die physikalische Technik oder Anleitung zur Anstellung von physikalischen Versuchen und zur Herstellung von physikalischen Apparaten mit möglichst einfachen Mitteln. *Illus.* 8°. *Braunschweig*, 1856.

Digitized by Google

Frick, J. Physical technics: or practical instructions for making experiments in physics, and the construction of physical apparatus, with the most limited means. Transl. by J. D. Easter. 8°. *Philadelphia*, 1862.

FRICTION. Relation betwe-n rolling and dragging. *See* **Johnson,** W. R. **Scientific essays.**

Frictional gearing co., Glasgow. Catalogue of wheels and machines manufactured by the patent frictional gearing co., Glasgow; and their agents. 8°. *Glasgow*, 1858.

Friedmann, Alexander. Marinewesen. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 17.**

Fries, Elias. Systema mycologicum sistens fungorum ordines, genera et species, quas ad normam methodi naturalis determinavit disposuit atque descripsit. 3 v. 12°. *Gryphiswaldiæ*, 1821.

FRINGE. Abridgments English Patents, No. 29.

——— Die Kunst des Posamentirers. *See* **Reimann, F. A. 105 Neuer Schauplatz der Künste.**

——— work. Posamentir-Arbeiten, von Carl Giani. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 5.**

Frischauf, C. Apparate, etc., von Wasserleitungen. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 18.**

Frisi, Paul. A treatise on rivers and torrents; with the method of regulating their course and channels; to which is added, an essay on navigable canals; transl. by John Garstin. New ed. 12°. *London*, 1861. **Weale's series, Nos. 121, 122.**

Fritz, P. Praktisches Lehrbuch für Schäfer, oder kurze Anleitung zur Zucht und Pflege der Schafe, sowie zur Kenntniss und Behandlung der Wolle. 12°. *Stuttgart*, 1866.

Fritze, W. Medicinische Jahrbücher; hrsg. v. *See* NASSAU.

Frohwein, Friedrich. Die neuesten Fortschritte in der Färberei und dem Zeugdruck. *Illus.* 8°. *Leipzig*, 1863.

Fromberg, Emanuel Otto. An essay on the art of painting on glass; from the German of. 12°. *London*, 1851. **Weale's series, No. 41.**

Fromberg, P. F. H. Liebig's question to Mulder tested; transl. by. *See* **Mulder, G. T.**

Frost, John. Grand illustrated encyclopedia of animated nature; embracing a full description of the different races of men; a complete history of the animal kingdom. 4°. *New York and Auburn*, 1855.

FROST and fire. *See* **Campbell, J. F.**

FRUIT culture. *See* **Downing, A. J. Rural essays.**

——— ——— Anleitung zur Obstkultur. *See* **Lucas,** Eduard.

——— ——— for the million. *See* **Gregg,** Thomas.

——— ——— Führer in der Obstkunde. *See* **Dochnal,** F. J.

——— ——— Obst- und Weinbau. *See* **Illustrirte Monatshefte.**

——— ——— Obstbaumzucht. *See* **Unterricht.**

——— ——— Obstkunde. *See* **Illustrirtes Handbuch.**

——— ——— Practical and scientific. *See* **Baker,** Charles R.

——— ——— Zeitschrift für Obst- und Weinbau. *See* **Pomona.**

——— drying. Obstdörren und Muszbereitung. *See* **Lucas,** Eduard.

——— ——— Obstdörrung, etc. *See* **Lucas,** Eduard.

——— How to preserve. *See* **Household manuals, v. 8.**

——— manual. *See* **Peterson,** *Mrs.* M. E.

——— must. Bereitung des Obstmostes. *See* **Schlipf,** *Oberlehrer.*

——— raisers and farmers' guide, etc. *See* **Seaman,** David.

——— trees, The cultivation of. *See* **Coxe,** William.

——— ——— Culture des arbres fruitiers. *See* **Issartier,** H. **Librairie** classique de Paul Dupont.

——— ——— Obstbaumzucht. *See* **Unterricht.**

——— ——— Traité des maladies des arbres fruitiers. *See* **Rubens,** Ferdinand.

FRUITS and farinacea the proper food of man. *See* **Smith,** John.

——— Deutschlands Obst- und Beerenfrüchte. *See* **Calwer,** C. G.

——— Württembergische Obstsorten. *See* **Lucas,** Eduard.

Digitized by Google

Fry, Edmund. A specimen of printing types, by E. Fry and co., letter founders to the Prince of Wales. 8°. *London*, 1788.

Fry, Joseph Storrs. An essay on the construction of wheel carriages, as they affect both roads and horses; suggestions relating to the principles on which tolls ought to be imposed. 8°. *Bristol*, 1820.

Fry, W. H. A complete treatise on artificial fish-breeding: transl. and ed. by. Contents: Treatise on the artificial fecundation and incubation of the eggs of fish, by C. E. P. Godenier; Practical instructions in fish raising, by M. Coste; Report by Milne-Edwards; Report by M. Coste; History and habits of the salmon, from Bell's Life in London. *Illus.* 12°. *New York*, 1854.

Fuchs, Johann Nepomuk von. Bereitung, Eigenschaften und Nutzanwendung des Wasserglases mit Einschluss der Stereochromie. Mit einem kurzen Auszug aus: Fr. Kuhlmann's Abhandlungen über die Anwendung der löslichen kieselsauren Alkalien zur Härtung poröser Kalksteine, in der Malerei, beim Drucken, etc. 8°. *München*, 1857-58.

——— Denkrede auf. *See* **Kobell,** F. v.

Fuchs, Josef. Katalog der Hölzer-Sammlung des allgemeinen österreichischen Apotheker-Vereines. 8°. *Wien*, 1866.

FUCUS edulis, Essay on the. *See* **Griffen,** A. R.

FUEL. Abridgments English Patents, No. 30.

——— *See* **Siemens,** C. William. **Van Nostrand's science series, No. 9.**

——— Artificial. Agglomération des charbons menus. *See* **Gerondeau,** A.

——— ——— Fabrication des combustibles agglomérés. *See* **Franquoy,** J.

——— Brennmaterialien und Feuerungsanlagen. *See* **Grothe,** Hermann. **285 Neuer Schauplatz der Künste.**

——— Brennstoffe in Oesterreich. *See* **Foetterle,** Franz.

——— Comparative value of the principal varieties of. *See* **Bull,** Marcus.

——— Compression des Torfes und der Braunkohle, etc. *See* **Leo,** Wilhelm.

——— Consumption of fuel in steam engines. *See* **Tredgold,** T. **Steam** engine, 2d series, v. 1.

——— Consumption of fuel in the locomotive engines of the L. and M. railway **Weale's papers on engineering, v. 2.**

——— De l'économie du combustible. *See* **Bède,** E.

——— Economical use of. *See* **Edwards,** F., *jr.*

——— Economy of. *See* **Buchanan,** R.

——— Economy of. *See* **Prideaux,** T. S. **Weale's series, v. 77*.**

——— Economy of fuel in steamers-of-war. *See* **Ryder,** A. P.

——— Facts in relation to the consumption of. *See* **Facts,** etc.

——— Management of. *See* **Bernan,** W.

——— Mineral. Auffindung der mineralischen Brennstoffe. *See* **Hartmann,** K. F. A. **167 Neuer Schauplatz der Künste.**

——— Über Brennstoffe. *See* **Siemens,** C. William.

——— Value of artificial fuels as compared with coal. *See* **Wormald,** John. **Van Nostrand's science series, No. 9.**

——— Vollständige Brennmaterialkunde. *See* **Hartmann,** K. F. A. **112 Neuer Schauplatz der Künste.**

——— Wärme- und Brennmaterialien. *See* **Perutz,** H.

Fuhst, H. Ueber ökonomische Dampferzeugung. Zahlen aus der Praxis. 8°. *Halle*, 1870. pp. 31.

Fuller, Andrew S. The forest tree culturist. A treatise on the cultivation of American forest trees; with notes on the most valuable foreign species. 12°. *New York*, 1866.

——— The grape culturist. A treatise on the cultivation of the native grape. 12°. *New York*, 1867.

——— The small fruit culturist. 12°. *New York*, 1867.

FULMINATING powders, Fabrication of. *See* **Dussauce,** A.

Fulton, Robert. Torpedo war, and submarine explosions. I. 8°. *New York*, 1810.

Digitized by Google

Fulton, Robert. A treatise on the improvement of canal navigation; exhibiting the numerous advantages to be derived from small canals, and boats of two to five feet wide, containing from two to five tons burthen; description of the machinery for facilitating conveyance by water through mountainous countries, independent of locks and aqueducts; observations on the great importance of water communications, with thoughts on, and designs for, aqueducts and bridges of iron and wood. 4°. *London*, 1796.

——— The life of. *See* **Colden,** C. D.

——— The life of. *See* **Reigart,** J. Franklin.

FUMIGATION. Traité de la méthode fumigatoire. *See* **Rapou,** T.

FUNDING system of the United States and Great Britain. *See* UNITED STATES.

FUNGI, British, A plain and easy account of. *See* **Cooke,** M. C.

——— Esculent funguses of England. *See* **Badham,** Charles David. roy. 8°. *London*, 1847.

——— Funguses growing about Halifax. *See* **Bolton,** James.

——— Mycologia Europea, seu completa omnium fungorum in variis Europæ regionibus detectorum enumeratio. *See* **Persoon,** C. H.

——— Outlines of British fungology. *See* **Berkeley,** M. J.

——— Spontane Bläuung einiger Pilze. *See* **Schoenbein,** C. F.

——— Systema mycologicum. *See* **Fries,** Elias.

——— their nature and uses. *See* **Cooke,** M. C. **International scientific series, v. 15.**

Funke, Otto. Atlas of physiological chemistry: a supplement to Lehmann's Physiological chemistry. 4°. *London*, 1853. pp. 29. **Cavendish society's publications.**

Funke, Walter. Betrachtungen über die Wirthschaftsorganisation von Landgütern im Lichte der neueren landwirthschaftlichen Naturforschung. 8°. *Stuttgart*, 1868.

Furiet. Éléments de mécanique. 8°. *Paris*, 1856.

FURNACES. Art de construire les fourneaux d'usines. *See* **Pelouze,** E. **Encyclopédie populaire, v. 17.**

FURNACES. Improvement in steam boiler. *See* **Baker,** H. F.

——— New philosophical. *See* **Glauber,** John Rudolph.

——— Notice sur les fourneaux économiques. *See* **Klein,** P.

——— Rauchverzehrende Oefen. *See* **Combes,** C., and **Viollet,** J. B. **226 Neuer Schauplatz der Künste.**

FURNITURE. Abridgments English Patents, No. 39.

——— Ancient and modern. *See* **Maskell,** William. **South Kensington art and science handbooks, No. 3.**

——— Cabinet maker's assistant; designs for furniture. *See* **Cabinet** maker.

——— Gothic; 15th century. *See* **Pugin,** A. W.

——— Household. *See* **Hope,** Thomas.

——— How to furnish and adorn a house on small means. *See* **Warren,** *Mrs.*

——— Manuel du marchand de meubles. *See* **Garnier-Audiger. 100 Manuels Roret.**

——— Musterzeichnungen von Möbeln. *See* HESSE-DARMSTADT.

——— Plans and designs for Gothic. *See* **Ungewitter,** G. G.

——— Pracht-Meubles neuesten Geschmacks. *See* **Sager,** A.

——— Suggestions for house decoration. *See* **Garrett,** Rhoda and Agnes.

FUR bearing animals. A monograph of North American mustelidæ. By E. Coues. UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden.**

——— dyeing. Färben und Appretiren der Pelzwaaren. *See* **Schrader,** Hermann.

——— manufacture. Die Kürschnerkunst. *See* **Schmidt,** C. H. **130 Neuer Schauplatz der Künste.**

FURS. Rauch- und Kürschnerwaaren. Von J. Max Hirsch. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 6.**

Fürstedler, Leopold. Beobachtungen über die Fortschritte auf dem Gebiete der Industrie und des gewerblichen Unterrichtes. Nach den Berichten der Pariser Weltausstellung. 8°. *Wien*, 1868.

Fürstenau, Carl. Die Ultramarin-Fabrikation. 8°. *Coburg*, 1864.

Digitized by Google

Fustegueras and **Hergot.** Cours de mécanique théorique et appliqué, à l'usage des établissements d'enseignement spécial des écoles d'art et métiers, et des industriels. 4e année. 8°. *Paris*, 1870.

G*.** Pennsylvania Dutch, and other essays. 8°. *Philadelphia*, 1872.

Gacon-Dufour, *Mme.* Manuel des habitans de la campagne, et de la bonne fermière. 2e éd. Par Mme. Celnart. 18°. *Paris*, 1834. **69 Manuels Roret.**

——— Manuel théorique et pratique du savonnier. 18°. *Paris*, 1827. **119 Manuels Roret.**

Gaetzschmann, Moritz Ferdinand. Vollständige Anleitung zur Bergbaukunst. 1ster Th. 2te Aufl. 8°. *Leipzig*, 1866.

Gagarin, *Prince.* Mémoire sur une machine à battre. *See* **M***.**

Gage, F. B. Theoretical and practical photography, on glass and paper; with rules for obtaining intense negatives with certainty. 12°. *New York*, 1859.

GAGER, The practical. *See* **Symons,** William.

GAGING simplified. *See* **Marquart,** John, *jr.*, and **Schreiner,** Henry.

Gale, J. A cabinet of knowledge; or, miscellaneous recreations, containing moral and philosophical essays, propositions, natural and metaphysical maxims, etc. 4th ed. 8°. *London*, 1808.

Gale, T. Electricity; or, ethereal fire, considered naturally, astronomically and medically; comprehending the theory and practice of medical electricity. 12°. *Troy*, 1802.

Galiani, Berardo. L'architettura: colla traduzione italiana e comento di. *See* **Vitruvius,** Pollio.

Galilæus Galilæi. Discursus et demonstrationes mathematicæ circa duas novas scientias pertinentes ad mechanicam et motum localem. sm. 4°. *Lugduni Batavorum*, 1699.

Gall, Ludwig. Praktische Anleitung nach neueren Erfahrungen alljährlich feinste Dessertweine als reine Naturgewächse; ferner, vorzügliche Mittelweine, selbst aus unreifen Trauben, und preiswürdigen Tischwein aus den Trestern darzustellen. 12°. *Trier*, 1861.

Gallaher, John S., *jr.*, Argument on appeal in the application of, for a patent for a machine for folding paper. *See* **Stansbury,** C. S.

Gallaudet, E. M. Report on deaf-mute instruction. UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

——— Report on government patronage of art. UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

Gallaudet, Thomas H., Tribute to. *See* **Barnard,** Henry.

Gallon. Art du tuilier et du briquetier; par G. Duhamel du Monceau et Fourcroy de Ramecourt. PARIS. **Acad. roy. des sc., arts et métiers, v. 14 and 4.**

Gallon. Machines et inventions approuvées par l'académie royale; publiées par. *See* PARIS. **Académie** des sciences.

Galloway, Elijah. History and progress of the steam engine; with a practical investigation of its structure and application; to which is added an extensive appendix, by Luke Hebert, containing descriptions of all the improved boilers; the constituent parts of steam engines; the machinery used in steam navigation; new plans for steam carriages; a variety of engines for the application of other motive powers, with a dissertation on the nature and properties of steam and other elastic vapors; the strength and weight of materials, etc. *Illus.* 8°. *London*, 1836.

——— Steam navigation; appendix "D," submarine propellers, by. *See* **Tredgold,** T.

Galloway, Robert. The first step in chemistry. 8°. *London*, 1851.

——— The second step in chemistry; or, the student's guide to the higher branch of science. 18°. *London*, 1864.

Galloway, Samuel. Ergonomy, or, industrial science. 12°. *Princeton, N. J., and Athens, Ga.*, 1853.

Galon. Art de convertir le cuivre rouge en laiton. PARIS. **Acad. roy. des sc., arts et métiers, v. 8 and 7.**

Galton, Douglas. An address on the general principles which should be observed in the construction of hospitals. 8°. *London*, 1869.

Digitized by Google

Galton, Francis. The art of travel; or, shifts and contrivances available in wild countries. 2d ed. *Illus.* 12°. *London,* 1856.

——— English men of science; their nature and nurture. 12°. *New York,* 1875.

GALVANISM, Epitome of electricity and. *See* **Epitome.**

——— Erfahrungen in dem Gebiete des Galvanismus. *See* **Osann,** G.

——— Galvanismus. *See* **Zimmermann,** W. F. A. **Handbuch der Physik, B. 1.**

——— Die gereizte Muskel- und Nervenfaser. *See* **Humboldt,** Alexander von.

——— Lectures on. *See* **Sturgeon,** W.

——— Scientific researches in. *See* **Sturgeon,** W.

——— A treatise on. *See* **Harris,** *Sir* William Snow.

——— Treatise on. By P. M. Roget. LONDON. **Society of useful knowledge, v. 2.**

GALVANIZED iron. *See* **Demarteau,** Amédée.

——— tinned iron and plumbic zinc. *See* Morewood, George B., and co.

GALVANIZING, Process of. *See* **Humphrey,** S. D.

GALVANOPLASTY. Die Galvanoplastik. *See* **Walker,** C. **123 Neuer Schauplatz der Künste.**

——— Die Galvanoplastik für industrielle und künstlerische Zwecke. *See* **Kresz,** Georg Ludwig.

Gamble, J. An essay on the different modes of communication by signals; containing a history of the progressive improvements in this art, from the first account of beacons to the most approved methods of telegraph correspondence. 4°. *London,* 1797.

GAME, How to cook. *See* **Household manuals, v. 4.**

GAMES. Abridgments English Patents, No. 51.

——— American boys' book of. *See* **American.**

——— American girls' book of. *See* **Leslie,** Eliza.

——— The art of amusing. *See* **Bellew,** Frank.

——— The game of red, white and blue. *See* **Hoyt,** Charles N.

——— The home book. *See* **Valentine,** R.

GAMES. Illustrirtes Spielbuch für Knaben. *See* **Wagner,** Hermann.

——— Illustrirtes Spielbuch für Mädchen. *See* **Leske,** Marie.

——— Jeu de l ombre et du piquet, etc. *See* **Royal** jeu.

——— with cards, viz: whist, cribbage, etc.; also chess, billiards and cricket. *See* **Hoyle.**

Gamgee, John. The cattle plague, with official reports of the international veterinary congresses, held in Hamburg, 1863, and in Vienna, 1865. 8°. *London* 1866.

Gand, Édouard. Fabrication du velours de coton; études théorique et pratique sur le tissage à bras, le tissage mécanique, etc. 1765 à 1865. *Illus.* 8°. *Paris,* 1865.

——— Le transpositeur, ou l'improvisateur de tissus. Appareil non breveté; basé sur la théorie des nombres premiers et des progressions arithmétiques ascendantes, donnant un nombre infini de combinaisons, à l'usage des compositeurs de tissus et des dessinateurs. *Illus.* 8°. *Paris,* 1871.

Gandry, Jules. Instruction pratique sur la construction, l'emploi et la conduite des machines agricoles en général, et des machines à vapeur rurales en particulier. 12°. *Paris,* 1859.

Gannal, J. N. History of embalming, and of preparations in anatomy, pathology and natural history. Transl. from the French, by R. Harlan. 8°. *Philadelphia,* 1840.

Gannett, Henry. Lists of elevations west of the Mississippi river. *See* UNITED STATES. **Interior dept. Geolog. survey. Misc. publs., No. 1.**

Ganot, A. Cours de physique purement expérimentale et sans mathématiques. 5e éd. 12°. *Paris,* 1872.

——— Elementary treatise on physics, experimental and applied. Transl. from 9th ed. by E. Atkinson. 12°. *London,* 1863.

——— Traité élémentaire de physique expérimentale et appliquée; et de météorologie, etc. 13e éd. 18°. *Paris,* 1868.

Garbett, Edward Lacy. Rudimentary treatise on the principles of design in

Digitized by Google

Garbett, Edward Lacy—Continued.
architecture, as deducible from nature and exemplified in the works of the Greek and Gothic architects. 12°. *London*, 1850. **Weale's series, Nos. 18, 19.**

GARDEN, The; a pocket manual of horticulture. *See* **Rural handbooks, No. 1.**

—— favorites. *See* **Hibberd,** Shirley.

—— flowers. *See* **Rand,** Edward Sprague.

—— Fruit, flower and kitchen. *See* **Neill,** Patrick.

Gardener and farmer's 'Reason why'; containing reasons for the principles of scientific cultivation applicable to gardening, agriculture and general science; the reason why, natural history, etc. 8°. *London*, 1860.

Gardener's chronicle: a newspaper of rural economy and general news. Ed. by Lindley and others. [From v. 7, 1844, name changed to "Gardener's chronicle and agricultural gazette".] 48 v., 1841–76. fol. and 4°. *London*, 1841–76——.

GARDENING. The American kitchen gardener. *See* **Fessenden,** F. G.

—— and botany. A general history of dichlamydeous plants, etc. *See* **Don,** George.

—— Conversations on. *See* **Conversations.**

—— A dictionary of. *See* **Johnson,** George William.

—— Encyclopædia of. *See* **Loudon,** J. C.

—— The farmer and gardener. *See* **Farmer.**

—— for the south. *See* **White,** William N.

—— Gardener and housekeeper. *See* **Upton,** Rebecca A.

—— The gardener's assistant. *See* **Thompson,** R.

—— The gardener's companion. *See* **Neill,** Patrick.

—— The gardener's dictionary. *See* **Miller,** Philip.

—— The gardener's magazine and register. *See* **Loudon,** J. C.

—— The gardener's textbook. *See* **Schenck,** Peter Adam.

—— Gartenbau in den k. preussischen Staaten. *See* **Berlin. Verein** zur Beförderung des Gartenbaues.

—— Implements for. Manuel des instruments de jardinage. *See* **Boitard,** P.

GARDENING. Le jardinier des fenêtres, des appartements et des petits jardins. *See* **Millet-Robinet,** *Mme.* Cora.

—— Journal de jardinage. *See* **Journal** d'agriculture.

—— Manuel du jardinier. *See* **Bailly,** C. **48 Manuels Roret.**

—— Manuel du menuisier des jardins. *See* **Desormeaux,** A. O. P. **75 Manuels Roret.**

—— scientific, Alphabet of, for the use of beginners. *See* **Rennie,** James.

—— The villa gardener. *See* **Loudon,** J. C.

—— The young gardener's assistant. *See* **Bridgeman,** Thomas.

Gardissal. L'invention. Journal de la propriété industrielle, littéraire, artistique et commerciale. *See* **Invention** (L').

Gardissal. Nouvelle loi des patentes anglaises appliquée depuis le 1er octobre 1852. Loi française du 5e juillet 1844; sur les brevets d'invention, avec des notes. Projet de loi pour la réforme de la loi de 1844. Notice sur les législations des brevets d'inventions dans les états suivants: États-Unis, Belgique, Hollande, Prusse, Autriche, Bavière, Wurtemberg, Saxe, Russie, Espagne, États de l'Église, États sardes. Lois anglaises des enregistrements des dessins et modèles de fabriques et d'ornements. Formules des principaux actes relatifs aux patentes anglaises. 2e éd. 8°. *Paris.* pp. 49.

Gardissal, Charles Desnos. Du régime de l'invention; par. *See* **Breulier,** A.

—— Technological dictionary in the English, French and German languages. *See* **Tolhausen,** *Dr.* and F., and **Gardissal.**

—— and **Gardissal,** C. D. Annuaire des inventeurs et des fabricants. Précis des législations française et étrangères sur les brevets d'invention et les marques de fabriques. 8°. *Paris*, 1858.

Gardner, Charles K. A dictionary of all officers, who have been commissioned, or have been appointed and served in the army of the United States since the inauguration of the first president, in 1789, to Jan. 1, 1853, with every commission of each; including distinguished officers of the volunteers and militia of the states, who have served in any conflict with an

Digitized by Google

Gardner, Charles K.—Continued.
enemy; and of the navy and marine corps, who have served with the land forces; indicating the battle in which every officer has been killed or wounded. 12°. *New York*, 1853. Later ed., *New York*, 1860.

Gardner, D. P. Medical chemistry for the use of students and the profession; a manual of the science with its applications to toxicology, physiology, therapeutics and hygiene. 8°. *Philadelphia*, 1848.

——— A new medical dictionary; containing an explanation of the terms used in anatomy, human and comparative physiology practice of medicine, obstetrics, surgery, pharmacy and botany. roy. 8°. *New York*, 1847.

Gardner, John. Letters on chemistry. *See* **Liebig,** J. v.

Gardner's photographic sketch-book of the war. 2 v. l. fol. *Washington, n. d.*

Gariot, J. B. Treatise on the diseases of the mouth, comprising the structure and functions of the mouth, the means of preserving it in beauty and health; and operations pertaining to the dental art. Transl. from the French by J. B. Savier. 8°. *Baltimore*, 1843. **American library of dental science, v. 4.**

Garlick, Theodatus. A treatise on the artificial propagation of certain kinds of fish, with the description and habits of such kinds as are most suitable for pisciculture; directions for the most successful modes of angling for such kinds of fish as are herein described. 8°. *Cleveland*, 1857.

Garnier, J. G. Leçons de calcul intégral. 8°. *Paris*, 1812.

Garnier, Jules, and **Harel,** Ch. Des falsifications des substances alimentaires, et des moyens chimiques de les reconnaître. 12°. *Paris*, 1844.

Garnier-Andiger. Manuel du tapissier, décorateur, et marchand de meubles. *Illus.* 18°. *Paris*, 1830. **100 Manuels Roret.**

Garratt, Alfred C. Guide for using medical batteries: being a compendium from his larger work on medical electricity and nervous diseases. 8°. *Philadelphia*, 1867.

Garretson, H. Report as chief executive commissioner, Vienna exhibition, 1873. UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 1.**

Garretson, James E. A treatise on the diseases and surgery of the mouth, jaws and associated parts. 8°. *Philadelphia*, 1869.

Garrett, Agnes. Suggestions for house decoration. *See* **Garrett,** Rhoda and Agnes.

Garrett, Rhoda and Agnes. Suggestions for house decoration in painting, woodwork and furniture. 16°. *Philadelphia, n. d.*

Garsault, François A. de. Le nouveau parfait maréchal; ou, la connoissance générale et universelle du cheval, avec un dictionnaire des termes de cavalerie. 4°. *La Haye*, 1741.

Garsault, François Alex. Pierre de. Art de la lingère, par. PARIS. **Acad. des sc., arts et métiers, v. 31 and 14.**

——— Art du bourrelier et du sellier, par. PARIS. **Acad. des sc., arts et métiers, v. 32 and 14.**

——— Art du cordonnier, par. PARIS. **Acad. des sc., arts et métiers, v. 32 and 3.**

——— Art du paumier raquetier et de la paume, par. PARIS. **Acad. des sc., arts et métiers, v. 29 and 3.**

——— Art du perruquier, par. PARIS. **Acad. des sc., arts et métiers, v. 29 and 14.**

——— Art du tailleur, par. PARIS. **Acad. des sc., arts et métiers, v. 31 and 14.**

Garstin, John. Treatise on rivers and torrents; transl. by. *See* **Frisi,** P. **Weale's series, Nos. 121, 122.**

GAS. Abridgments English Patents, No. 17.

——— consumer's guide. *See* **Richards,** William.

——— Dampfkraft durch die Gaskraft ersetzt. *See* **Consentius,** G.

——— Darstellung der Gasbeleuchtung. *See* **Julia de Fontenelle,** J. S. E. **36 Neuer Schauplatz der Künste.**

——— Éclairage au gaz. *See* **Harcourt,** E. R. d'.

——— Éclairage par le gaz. *See* **Julia de Fontenelle,** J. S. E. **79 Manuels Roret.**

——— engineering. *See* **Bower,** George.

Digitized by Google

GAS explosion at the city post office, Washington; report of commission, and testimony. 8°. *Washington*, 1867.
—— Four à gaz et à chaleur régénérée. *See* **Kraus**, M. F.
—— furnaces and heating. Die Bedeutung der Gasfeuerung und Gasöfen. *See* **Stegmann**, H.
—— Gasbeleuchtung. *See* **Jahn**, C. F. A.
—— How to manage. *See* **Wilkins**, F.
—— light. *See* **History** of the process of manufacture, etc.
—— —— Treatise on. *See* **Accum**, F.
—— lighting. American gas light journal. *See* **American**.
—— —— Chemistry of. *See* **Chemistry**.
—— —— Beiträge zur Geschichte der Gasbeleuchtung. *See* **Blochmann**, G. M. S.
—— —— Fortschritte der Gasbeleuchtung. *See* **Hartmann**, C. F. A. **182 Neuer Schauplatz der Künste.**
—— —— Gasbeleuchtung. *See* **Tieftrunk**, Ferdinand.
—— —— Handbuch für Steinkohlengas-Beleuchtung. *See* **Schilling**, N. H.
—— —— Journal of. *See* **Journal**.
—— —— Theory and practice of. *See* **Peckston**, F. S.
—— —— water supply, and sanitary improvement, The journal of. *See* **Journal** of gaslighting.
—— —— Zeitschrift für Gasbeleuchtung. *See* **Voigt**, B. F.
—— Manipulation of. *See* **Banister**, Henry.
—— Manufacture and distillation of coal. *See* **Richards**, William.
—— measurement. *See* **Hartley**, F. W.
—— —— Gasometrische Methoden. *See* **Bunsen**, R.
—— —— Pneumodensimetro automatico. *See* **Negri**, Antonio de.
—— Treatise on. *See* **Perkins**, E. E.
—— Treatise on coal. *See* **Clegg**, S., *jr.*
—— works of London. *See* **Colburn**, Zerah.
—— —— Treatise on. *See* **Hughes**, S. **Weale's series, Nos. 82**, 83*, 83 bis.**

Gasparin, De. De la connaissance des terrains agricoles. 18°. *Bruxelles*, 1854.
—— Guide des propriétaires de biens ruraux affermés. 2e éd. 18°. *Paris, n. d.*
—— Mémoire sur la culture du safran aux environs d'Orange, département de Vaucluse. 8°. *Paris*, 1847. pp. 25.

Gasteiger, Albert v Die Handelsverhältnisse Persiens in Bezug auf die Absatzfähigkeit österreichischer Waaren. 8°. *Wien*, 1862.

GASTRIC juice, The. *See* **Beaumont**, William.

GASTRONOMIC regenerator. *See* **Soyer**, A.

GASTRONOMY. The pantropheon. *See* **Soyer**, A.

GATES. Portes cochères, portes d'entrée, croisées, etc., de Paris. *See* **Krafft**, J. Ch.

GATEWAYS of the central park, Designs for. *See* **Hunt**, Richard M.

GATLING guns of large caliber, Report on. *See* UNITED STATES. **War** department.

Gatty, Alfred. The bell: its origin, history and uses. 12°. *London*, 1848.

Gätzschmann, M. F. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse**, J. A.

Gaubert, Paul, Cours d'agriculture, supplément. *See* **Cours**.

Gaudin, M. D. Résumé général du daguerréotype; photographie sur plaques. 8°. *Paris*, 1852.

Gaugain, *Mrs.* Jane. The lady's assistant in knitting, netting and crochetwork: an appendix, containing directions and remarks for embroidery or worsted work, raised cut-work, tatting, etc. Illustrated by patterns. 3 v. obl. 8°. *London*, 1847–57.

GAUGER'S hand-book. A complete and concise treatise on gauging, as practiced by the gaugers of the customs at the port of New York. 24°. *New York*, 1855.

GAUGES, Steam and vacuum. *See* **Stillman**, P.

GAUGING. *See* **Cochran**, John W.
—— American gauger. *See* **Schreiner**, H., and **Stewart**, F.
—— Gaging simplified. *See* **Marquart**, John, *jr.*, and **Schreiner**, Henry.
—— Handbook of. *See* **Keene**, J. B.
—— Manuel du jaugeage. *See* **Laudier** and **D.-M. 70 Manuels Roret.**
—— The practical gager. *See* **Symons**, William.
—— The royal gauger. *See* **Leadbetter**, Charles.
—— The universal gauger. *See* **Roat**, A.

Gaugler de Gempen. Essai d'une description de l'armement rayé de l'infanterie européenne, en 1858. Accompagné d'un atlas de 30 planches. 8°. *Paris*, 1858.

Digitized by Google

Gaultier, L. First lessons in practical geometry; transl. from the French by W. R. Johnson. 18°. *Philadelphia,* 1839.

Gaultier de Claubry, Henri François. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

Gauthey. Principles of construction. *See* **Weale, J. Theory of bridges, v. 1.**

Gautier, A. Traité des alimens, leurs qualités, leurs effets, et du choix que l'on doit en faire, etc. 18°. *Paris,* 1823. **Encyclopédie populaire, v. 6.**

Gautier, Charles. Catalogue of wines, brandies, liquors, etc. 8°. *Washington,* 1869–70. pp. 11.

Gautier, E. J. Armand. De la coloration artificielle des vins, et des moyens de reconnaître la fraude. 8°. *Paris,* 1876.

——— La sophistication des vins. Coloration artificielle et mouillage. Moyens pratiques de reconnaître la fraude. sm. 8°. *Paris,* 1877.

Gautier, Henri. Traité des ponts; où il est parlé de ceux des Romains et de ceux des modernes. 3e éd. 8°. *Paris,* 1855.

Gavarret, Louis Denis Jules. Télégraphie électrique. 12°. *Paris,* 1861.

——— Traité d'électricité. *Illus.* T. 1–2. 12°. *Paris,* 1857–58.

Gayarré, Charles. Influence of the mechanic arts on the human race. Two lectures. 12°. *New York,* 1854.

Gaylord, Willis. The cultivator; ed. by. *See* **Cultivator.**

Gay-Lussac, Joseph Louis, and **Pouillet,** Claude Servais Mathias. Die Anlegung der Blitzableiter; übersetzt und zusammengestellt von Christian Heinr. Schmidt. *Illus.* 8°. *Weimar,* 1836. **229 Neuer Schauplatz der Künste.**

Gayot, Eugène. Encyclopédie de l'agriculture. *See* **Moll,** L.

GAZETTE, Official, of the United States patent office. *See* UNITED STATES. **Interior dept. Patent office.**

GAZETTEER of the world, Harper's statistical. *See* **Smith,** J. C.

——— Lippincott's new pronouncing. *See* **Thomas,** J.

——— New universal. *See* **Brookes,** R.

——— of the manufactures and manufacturing towns of the United States, containing a review of the extent and condition of the manufacturing interests and resources. 4°. *New York,* 1866.

——— Universal. *See* **McCulloch,** J. R.

GEARING. Construction der Verzahnungen. *See* **Haindl,** S.

Gébé, Victor. Catalogue de journaux publiés ou paraissant à Paris, donnant leurs titres, sous-titres, rédacteurs principaux, le format et le mode de publication: comprenant les divers prix d'abonnement pour la France, l'indication des années de publication et des bureaux d'abonnement, et accompagné d'une table systématique: précédé d'une statistique de la presse et du tarif postal pour la France et l'union générale des postes. 2e éd. 18°. *Paris,* 1877.

Geddes, George. Observations on plank roads, together with the general plank road law of the state of New York, as amended by the laws of 1847, '48, '49, and '50; with such parts of the revised statutes as are referred to in the several acts in relation to plank roads. 8°. *New York,* 1850. pp. 48. [Bound with Kingsford's "On plank roads".]

Gee, George. The practical gold worker, or the goldsmiths and jewellers' instructor in the art of alloying, melting, reducing, coloring, collecting, and refining: the processes of manipulation, recovery of waste, chemical and physical properties of gold; with a new system of mixing its alloys; solders, enamels, and other useful rules and recipes. sm. 8°. *London,* 1877.

Geest, F. A. W. Lehrbuch des Bleichens und der gesammten Färberei auf baumwollene Garne und Gewebe. *Illus.* 8°. *Weimar,* 1846. **141 Neuer Schauplatz der Künste.**

——— Praktisches Handbuch der gesammten Kattunfabrikation und der Kunst Seide und seidene Zeuge zu färben. 8°. *Weimar,* 1843. **139 Neuer Schauplatz der Künste.**

Geisler, A. Die Anilin-Farbstoffe, ihre Darstellung, Constitution, Synonymik und Verfälschungen. 8°. *Dorpat,* 1865.

Geiss, Moritz. Zinkguss-Ornamente, Statuen und Sculpturen nach antiken und modernen Modellen ausgeführt und gegossen in der Zinkgiesserei für Architectur. *Illus.* 21 Hefte. 4°. *Berlin,* 1844.

Geissler, J. G. Der Drechsler; oder praktischer Lehrbegriff der gemeinen und höhern Drehkunst. 3 Theile in 2 B. 4°. *Leipzig,* 1795.

Digitized by Google

Geitel, C. Bericht über die XX. Versammlung deutscher Land- und Forstwirthe; hrsg. von. *See* GERMANY. **Versammlung.**

Geldard, James. Hand-book of cotton manufacture; or, a guide to machine building, spinning and weaving; with examples, calculations and important tables. 12°. *New York,* 1867.

Gell, *Sir* William. The topography of Rome and its vicinity. 2 v. 8°. *London,* 1834.

Gellert, C. E. Metallurgic chymistry; a system of mineralogy in general, and of all the arts arising from this science. Transl. from the German by T. S. 8°. *London,* 1776.

Gemmellaro, Carlo. Elogio accademico del. *See* **Aradas,** Andrea.

GEMS. Kunst des Goldarbeiters, etc. Anhang über Edelsteine. *See* **Kulmer,** Rudolf v. **8 Neuer Schauplatz der Künste.**

——— Natural history of. *See* **King,** C. W.

——— A popular treatise on. *See* **Feuchtwanger.**

Gener, Placido and Justo. The steam engine. *See* **Hann,** J.

GENERAL average, Adjustment of. *See* **Dixon,** Francis B.

——— index to Appleton's annual cyclopædia, embracing vols. 1-15, inclusive, and the years 1861-1875. 8°. *New York,* 1877.

——— theory and phenomena of earthquakes and volcanoes; wherein the several systems of M. Amontons, Dr. Lister, M. de Buffon, Dr. Woodward, and others are considered. To which are added an historical account of the various appearances and effects of the most memorable earthquakes and eruptions of volcanoes on record; a history of the Lisbon earthquake, by an ingenious gentleman who was an eyewitness of that tremendous calamity. 12°. *London,* 1756.

GENESIS of species. *See* **Mivart,** St.-George.

GENEVA. La société des arts de Genève. Bulletin de la classe d'agriculture. Nos. 1-173. T. 1-8. 8°. *Genève,* 1822-62.

——— ——— Bulletin de la classe d'industrie. Nos. 56-78. 3 v. 1855-1862. [*Genève.*] *n. t. p.*

Genevois, J. A. Some new inquiries tending to the improvement of navigation. 8°. *London,* 1760. pp. 28.

Génie industriel. Revue des inventions françaises et étrangères. Annales des progrès de l'industrie agricole et manufacturière, technologie, mécanique, chemins de fer, navigation, chimie, agriculture, mines, travaux publics, arts divers, et biographie des inventeurs, par Armengaud, frères. T. 1-39, 1851-70. [T. 24 contains a subject-matter index.] 8°. *Paris,* 1851-70.

Genin, John N. An illustrated history of the hat. 16°. *New York,* 1850.

GENOA. Atti della Società ligure di storia patria. Tomo 1-9, 1858-69. roy. 8°. *Genova,* 1858-72.

——— Coléra Asiatico in Genova. *See* **Coléra.**

Gentele, J. G. Lehrbuch der Farbenfabrikation, etc. *Illus.* 8°. *Braunschweig,* 1860.

Genth, F. A., and **Gibbs,** Wolcott. Ammonia cobalt bases. **Smiths'n contrib., v. 9.**

Gentil, A. A. P. Dissertation sur le café, et sur les moyens propres à prévenir les effets qui résultent de sa préparation communément vicieuse, et en rendre la boisson plus agréable et plus salutaire. Avec une gravure en taille douce. 12°. *Paris,* 1787.

Gentil, F. Le jardinier solitaire; the solitary Carthusian gard'ner; being dialogues between a gentleman and a gardener; containing the method to make and cultivate all sorts of gardens, with many new experiments therein, and reflections on the culture of trees, written in French. Also the compleat florist, by L. L. D'Auxerre. 8°. *London,* 1706.

GEODESY, Practical. *See* **Williams,** J. B.

——— Tables useful in. *See* UNITED STATES. **War dept.**

GEODETIC instruments. Geodätische Instrumente. Von W. Tinter. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

——— ——— Instrumente der Geodäsie. *See* **Engelbreit,** K.

——— ——— Instrumente und Werkzeuge der höheren Messkunst. *See* **Schneitler,** C. F.

Geoffroy, Stéphane. Traité pratique pour l'emploi des papiers du commerce en photographie; nouveaux procédés améliorateurs; préparations préliminaires

Digitized by Google

Geoffroy, Stéphane—Continued.
naires au clirage et aux bains sensibilisateurs pour épreuves positives et négatives. 8°. *Paris*, 1855. pp. 100.

GEOGNOSY, or the facts and principles of geology against theories. *See* **Lord**, David N.

GEOGRAPHY, The American universal. *See* **Morse**, J.

——— An atlas of classical. *See* **Hughes**, William.

——— Atlas of the world. *See* **Colton**, G. W.

——— By W. J. Hamilton. *See* **Herschel**, *Sir* J. F. W. **Manual** of scientific enquiry.

——— Canadian Red river exploring expedition, of 1851. *See* **Hind**, Henry Youle.

——— Comparative geography of Palestine and the Sinaitic peninsula. *See* **Ritter**, Carl.

——— La construction et le dessin des cartes géographiques. *See* **Perrot**, A. M. **12 Manuels Roret.**

——— Cyclopædia of commercial: *See* **Waterston**, W., and **Burton**, J. H.

——— Elements of map drawing. *See* **Cartée**, Cornelius S.

——— Encyclopædia of. *See* **Murray**, H.

——— Geographical series. Primary. *See* **Guyot**, A.

——— Geographische Bildungs- und Unterrichtsmittel. Von Ant. Steinhauser. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— Geological and geographical survey of the territories. *See* UNITED STATES. **Interior dept. Geolog. survey.**

——— Handbook of universal. *See* **Callicot**, T. Carey.

——— in common and grammar schools. Geographie. Leistungen der Volks- und Mittelschule. Von R. Perkmann. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— India, ancient and modern. *See* **Allen**, David O.

——— Lippincott's new pronouncing gazetteer. *See* **Thomas**, J.

——— Manuel de géographie. *See* **Villiers**, A. de. **11 Manuels Roret.**

——— Mitchell's new general atlas. *See* **Mitchell**, S. Augustus.

——— Mittheilungen der k. k. geographischen Gesellschaft. *See* VIENNA. **K. k. geogr.**

GEOGRAPHY, Physical. *See* **Herschel**, *Sir* J. F. W.

——— ——— *See* **Somerville**, Mary.

——— ——— Man and nature. *See* **Marsh**, G. P.

——— Rapport sur les sciences géographiques en 1860. *See* **Maury**, L. T. Alfred.

——— A system of ancient and mediæval, *See* **Anthon**, Charles.

——— Treatise on mathematical geography. By E. Lloyd. *See* LONDON. **Society of useful knowledge, v. 3.**

GEOLOGY and extinct volcanoes of central France. *See* **Scrope**, G. Poulet.

——— and inhabitants of the ancient world in the Crystal palace. *See* **Owen**, R. **Crystal palace library, v. 3.**

——— and mineralogy, considered with reference to natural theology. *See* **Buckland**, William.

——— and terrestrial magnetism, On the connexion of. *See* **Hopkins**, Evans.

——— Annual report of the progress of. *See* **Liebig**, J. v., and **Kopp**, H.

——— Applications of geology to the arts and manufactures. *See* **Ansted**, D. T.

——— By C. Darwin. *See* **Herschel**, *Sir* J. F. W. **Manual** of scientific enquiry.

——— Coup d'œil géologique sur les mines de la monarchie autrichienne. *See* **Hauer**, F., and **Foetterle**, F.

——— Dictionary of geology and mineralogy. *See* **Humble**, W.

——— Elements of. *See* **Bischof**, K. G. **Cavendish society publications.**

——— Field notes of. *See* **Osborn**, A.

——— Geognostische Beschreibung der preussischen Oberlausitz. *See* **Gloc'ker**, E. F.

——— Geological and geographical survey of the territories. F. V. Hayden. *See* UNITED STATES. **Interior dept.**

——— Geological and geographical survey of the territories. J. W. Powell. *See* UNITED STATES. **Interior dept.**

——— Geological essay on the imperfect evidence in support of a theory of the earth. *See* **Kidd**, J.

——— Geological exploration of the 40th parallel. *See* UNITED STATES. **War department.**

——— Geological map of the United States and British provinces. *See* **Marcou**, J.

——— Geological maps of Indiana, Ohio and Tennessee. *See* **Mendenhall**, E.

Digitized by Google

GEOLOGY. Geological observations in the United States. *See* **Lyell, C. Travels** in North America.

——— Geological survey of the country west of the 100th meridian. *See* UNITED STATES. **War** department. Bureau of engineering.

——— The great stone book. *See* **Ansted,** D. T.

——— Handbook of geological terms and. *See* **Page,** D.

——— Histoire des progrès de la géologie. *See* **Archiac,** *Le Vicomte* d'.

——— Hütten-Erzeugnisse, etc., als Stützpuncte geologischer Hypothesen. *See* **Leonhard,** K. C.

——— Illustrations of surface; by E. Hitchcock. **Smiths'n contrib., v. 9.**

——— in its relations to the arts and manufactures. *See* **Page,** David.

——— Jahrbuch der k. k. geologischen Reichsanstalt. *See* VIENNA.

——— Jahresbericht über die Fortschritte der Geologie. *See* **Liebig,** J. v., and **Kopp,** H.

——— K. k. geologische Reichsanstalt. Catalog ihrer Ausstellungsgegenstände. Wien, 1873. *See* VIENNA. **K. k. geologische** Reichsanstalt.

——— Lectures on. *See* **Lyell,** Charles.

——— Manual of. *See* **Dana,** James D.

——— Microscopical petrography. Report by F. Zirkel. *See* UNITED STATES. **War** department.

——— Notizblatt des Vereines für Erdkunde. *See* DARMSTADT.

——— of the countries visited by her majesty's ship the Beagle. *See* **Darwin,** Charles.

——— of the Lake Superior land district, Report on. *See* UNITED STATES. **Interior** department.

——— of the Uinta mountains, Report on. By J. W. Powell. *See* UNITED STATES. **Interior dept. Geolog. survey.**

——— Physical atlas. *See* **Johnston,** A. K.

——— Publications of the United States geological survey of the territories, Catalogue of. F. V. Hayden. *See* UNITED STATES. **Interior dept. Geolog. survey.**

——— Science of. *See* **Ansted,** D. T., and others. **Orr's circle of the sciences, v. 4.**

GEOLOGY. Thèses pour obtenir le grade de docteur ès sciences physiques. *See* **Pourian,** A. F.

——— Treatise on. *See* **Phillips, J. Lardner's cabinet cyclopædia, v. 124, 125.**

——— Treatise on. *See* **Portlock, J. E. Weale's series, No. 3.**

——— Zeitschrift der deutschen geologischen Gesellschaft. *See* BERLIN. **Deutsche.**

GEOMETRICAL analysis. *See* **Hallowell,** Benjamin.

——— ——— *See* **Hugo,** D. Antonius.

——— drawing. Instrumente und Werkzeuge der geometrischen Zeichnenkunst. *See* **Schneitler,** C. F.

——— instruments. Die geometrischen Instrumente. *See* **Hunäus,** G. C. K.

——— tables. Tafeln über verschiedene Gegenstände der praktischen Geometrie. *See* **Bauernfeind,** C. M.

GEOMETRY, analytic, A text-book of. *See* **Peirce,** James Mills.

——— Analytical. *See* **Church,** A. E.

——— ——— *See* **Howison,** George H.

——— ——— *See* **Johnson,** William Woolsey.

——— ——— *See* **Loomis,** Elias.

——— ——— *See* **Robinson,** H. N.

——— and conic sections. *See* **Robinson,** H. N.

——— and the science of form, An introduction to. *See* **Introduction.**

——— and trigonometry. *See* **Docharty,** G. B.

——— and trigonometry. *See* **Sestini,** B.

——— and trigonometry, The elements of. *See* **Davies,** Charles.

——— A comprehensive system of. *See* **Cochrane,** Richard.

——— Die darstellende Geometrie. *See* **Rössler,** H.

——— An elementary treatise on. *See* **Peirce,** Benjamin.

——— Elemente des geometrischen Zeichnens. *See* **Rössler,** H.

——— Elements of. *See* **Davies,** Charles.

——— Elements of. *See* **Hassler,** F. R.

——— Elements of. *See* **Whitlock,** George C.

——— Elements of analytical. *See* **Smyth,** William.

——— Elements of descriptive. *See* **Davies,** Charles.

——— Elements of descriptive. *See* **Schooler,** Samuel.

Digitized by Google

GEOMETRY, Elements of plane. *See* **Keith**, Thomas.
——— Elements of plane. *See* **Scholfield**, N.
——— Elements of solid. *See* **Scholfield**, N.
——— The first book of. *See* **First** book.
——— First lessons in. *See* **Gaultier**, L.
——— Geometrical and graphical essays. *See* **Adams**, George.
——— Géométrie appliquée à la transformation du mouvement dans les machines. *See* **Girault**, C.
——— Higher. *See* **Scholfield**, N.
——— Introduction to practical. *See* **Nicholson**, Peter. **Mechanic's** companion.
——— Lessons in. *See* **Kirkman**, T. P. **Weale's series, No. 105.**
——— Manuel de géométrie. *See* **Terquem**, O. **8 Manuels Roret.**
——— of the arts. *See* **Dupin**, Charles.
——— plane, solid and spherical; published under the superintendence of the Society for the diffusion of useful knowledge. 8°. *London*, 1830.
——— Practical. *See* **Burn**, Robert Scott.
——— ——— applied to the useful arts. *See* **Langley**, Battey.
——— Treatise on analytical. *See* **Hann**, J. **Weale's series, No. 90.**
——— Treatise on descriptive geometry. Extracted from the French of G. Monge. *See* **Heather**, J. F. **Weale's series, Nos. 76, 77.**
——— Useful. *See* **Taylor**, Charles.

George, H. B. The Oberland and its glacier; explored and illustrated with ice-axe and camera. 4°. *London*, 1866.

GEORGETOWN college, D. C., Annals of the astronomical observatory of. Description of the observatory, of the transit instrument and meridian circle. 4°. *New York*, 1852.
——— directory, 1858-60. *See* **Boyd**, W. and H.

Georgius. Georgii Agricolæ Kempnicensis Medici ac Philosophi clariss. de re metallica libri 12. fol. *Basileæ*, 1657.

Gérard, George. French course; or, theoretical and practical system of the French language, etc. 8°. *Portland and Boston*, 1848.

Gerarde, John. The herball; or, generall historie of plantes, gathered by. Imprinted at London, by J. Norton. fol. *London*, 1597.

Gérardin, H. Théorie des moteurs hydrauliques; applications et travaux exécutés pour l'alimentation du canal de l'Aisne à la Marne, par des machines. Texte, 8°; atlas, l. fol. *Paris*, 1872.

Gerhard. An introduction to the general art of drawing; wherein is set forth the grounds and properties which of this infallible and judicious art, are necessary to be known and understood. Formerly set out by that excellent limner, Mr. Gerhard, of Brugge. And now, much augmented and amended, with some observations. Set forth at Middleburgh, by W. Gore. Truly translated into English, by J. L. 4°. *London*, 1674.

Gerhard, Benjamin. Law of evidence; notes by. *See* **Starkie**, T.

Gerhard, W. W. The diagnosis, pathology and treatment of diseases of the chest. 3d ed. roy. 8°. *Philadelphia*, 1850.

Gerhardt, Charles F. Traité de chimie organique. T. 1-4. 8°. *Paris*, 1853-56.

Gerlach, Friedrich Wilhelm von. Die Bestimmung der Gestalt und Grösse der Erde. 8°. *Wien*, 1782.

Gerlach, J. Die Photographie als Hülfsmittel mikroskopischer Forschung. 8°. *Leipzig*, 1863.

Gerli, Agostino. Opuscoli di Agostino Gerli. fol. *Parma*, 1785.

GERMAN dictionary. Deutsches Wörterbuch. *See* **Grimm**, J. K. L. and W. K.
——— ——— Wörterbuch der deutschen Sprache. *See* **Sanders**, Daniel.
——— English dictionary. *See* **Adler**, George J.
——— ——— ——— *See* **Flügel**, Johann G.
——— ——— ——— Deutsch-englisches Wörterbuch. *See* **Hilpert**, J. L.
——— ——— pocket dictionary. *See* **Oehlschläger**, J. C.
——— French dictionary. Dictionnaire des langues française et allemande. *See* **Mozin**, D J.
——— grammar, Elements of. *See* **Krauss**, E. C. F.
——— language, Elementary German primer for learning to read the. *See* **Elementary.**
——— ——— A new and easy method of learning the. *See* **Ahn**, F.
——— ——— A new elementary course in the. *See* **Campbell**, Gabriel.

Digitized by Google

GERMAN language. A practical and easy course of the. *See* **Otto**, Emil.

——— method of teaching modern languages. *See* **Keller**, Edward.

——— universities. Die Selbstständigkeit des deutschen Universitätsgeistes. *See* **Schulze**, Friedrich G.

GERMANTOWN, Pa. Directory for 1855. *See* **McElroy, A. Philadelphia** directory.

GERMANY. Allgemeines Bücher-Lexikon. *See* **Heinsius**, J. W.

——— A catalogue of books and maps published in. *See* Westermann, B., and co.

——— Chemins de fer d'Allemagne. *See* **Le Chatelier.**

——— Deutsche Zollvereins-Regierungen. Amtlicher Bericht über die Industrie-Ausstellung aller Völker zu London im Jahre 1851, von der Berichterstattungs-Kommission der Deutschen Zollvereins-Regierungen. Theil 1-3. 8°. *Berlin*, 1852-53.

——— Deutscher Zeitungs-Katalog. *See* **Deutscher.**

——— Flora of. Deutschlands Flora. *See* **Calwer**, C. G.

——— Flora of. Technische Pflanzen. *See* **Calwer**, C. G.

——— History of the German empire. *See* **Dunham, S. A. Lardner's cabinet cyclopædia, v. 28-30.**

——— Patent law of. Das Patentgesetz für das deutsche Reich. *See* **Dambach**, Otto.

——— Versammlung deutscher Land- und Forstwirthe. Amtlicher Bericht über die XX. Versammlung, etc. 8°. *Braunschweig*, 1859.

——— Versammlung deutscher Naturforscher und Aerzte. Bericht. *See* **Versammlung.**

——— Zollverein governments. London exhibition, 1862. Special catalogue of the Zollverein department. Edited by authority of the commissioners of the Zollverein governments. 8°. *Berlin*, 1862.

——— Zollvereins-Regierungen. Londoner Ausstellung, 1862. Special-Catalog der gewerblichen Ausstellung des Zollvereins. Hrsg. von den Commissionarien der Zollvereins-Regierungen. 8°. *Berlin*, 1862.

Gérocomie, ou code physiologique et philosophique, pour conduire les individus des deux sexes à une longue vie, en les dérobant à la douleur et aux infirmités; par une société de médecins. 8°. *Paris*, 1807.

Gerold and co. Literatur der letzten fünf Jahre 1865-1870; aus dem Gesammt-Gebiete des Bau- und Ingenieurwesens. Mit Einschluss des Kunstgewerbes in deutscher, französischer und englischer Sprache. 8°. *Wien*, 1870.

Gérondeau, Henri. Note sur l'agglomération des charbons menus. 8°. *Paris et Liége*, 1861.

——— Notes sur les machines à gaz. 8°. *Paris et Liége*, 1864.

Gerrard, John. Siglarium Romanum; sive explicatio notarum ac literarum, quæ hactenus reperiri potuerunt in marmoribus, lapidibus, nummis, auctoribus, aliisque Romanorum veterum reliquiis. 4°. *Londini*, 1792.

Gerstenhöfer, Moritz. Hülfsbuch für den gewerblichen Chemiker. 16°. *Leipzig*, 1854.

Gerstner, A., and **Riedl**, Franz. Zuckerbäckerei, etc. Tabak, etc. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 4.**

Gerstner, Franz Anton von. Handbuch der Mechanik; hrsg. von. *See* **Gerstner**, F. J. von.

——— Die innern Communicationen der Vereinigten Staaten von Nordamerika. Nach dessen Tode aufgesetzt, redigirt und hrsg. von L. Klein. *Illus.* B. 1-2. 4°. *Wien*, 1842-43.

Gerstner, Franz Joseph von. Handbuch der Mechanik, aufgesetzt, mit Beiträgen von neueren englischen Konstructionen vermehrt, und hrsg. von Franz Anton von Gerstner. B. 1-3. Mit Kupfertafeln. 4°. and obl. 4°. *Prag und Wien*, 1831-34.

Geschichte der k. k. Hof- und Staatsdruckerei in Wien, von einem Typographen dieser Anstalt. In zwei Theilen: I. Geschichte. II. Beschreibung. [In German, English, Italian, and French in parallel columns.] *Illus.* 8°. *Wien*, 1851.

Gesenius, Wilhelm. A Hebrew and English lexicon of the Old Testament; including the biblical Chaldee: from the Latin. Transl. by Edward Robinson. 3d ed. 8°. *Boston*, 1849.

——— Hebrew grammar. 14th ed. Rev. by E. Rödiger. Transl. by T. J. Conant. roy. 8°. *New York*, 1846.

Gesner, Abraham. A practical treatise on coal, petroleum, and other distilled oils. 8°. *New York*, 1861. Also 2d ed.

Digitized by Google

Gesner, A.—Continued.
Revised by George W. Gesner. 8°. *New York, London, Paris, Melbourne, and Madrid,* 1865.

Gesner, George Weltden. A practical treatise on coal, petroleum, etc. 2d ed. *See* **Gesner,** Abraham.

Gesnerus, Jo. Matthia. Scriptores rei rusticæ veteres Latini, Cato, Varro, Columella, Palladius, quamvis nunc accedit Vegetius de mulo-medicina, Gargilii Martialis fragmentum. Lexicon rei rusticæ aliaque continentur. 2 v. 4°. *Lipsiæ,* 1773.

Gessert, M. A. Rudimentary treatise on the art of painting on glass, or glass-staining: from the German. An appendix on the art of enamelling, etc. 12°. *London,* 1851. **Weale's series, No. 40.**

Getchell, F. H. The maternal management of infancy: for the use of parents. 16°. *Philadelphia,* 1868.

Gewerbe- und Handels-Adressbuch für Württemberg. 8°. *Stuttgart,* 1855.

Gewerbeblatt aus Württemberg. *See* STUTTGART.

——— für das Groszherzogthum Hessen. Zeitschrift des Landesgewerbvereins, von H. Röszler und F. Fink. 12 Jahrg., 1849–72. [Jahrg. 1863–68 and 1871 missing.] 4°. *Darmstadt,* 1849–72.

Gewerbhalle. Organ für den Fortschritt in allen Zweigen der Kunstindustrie. Von W. Bäumer und J. Schnorr. Jahrg. 1–5, Beilagen 1–5, 1863–67. 4°. *Stuttgart,* 1863–67.

Gewerbzeitung. Organ für Interessen des bayerischen Gewerbstandes. Hrsg. von dem Gewerbvereine der Stadt Fürth, unter der Redaktion von J. G. Berg, Dr. Bernheim und Dr. Brentano. Jahrg. 1–15, 1851–65. 5 B. 4°. *Fürth,* 1851–65.

Ghersi, G. D. Osservazioni teorico-pratiche sulla navigazione. 8°. *Genova,* 1857.

——— Trattato del nuovo timone di prora inventato dal. 8°. *Genova,* 1858. pp. 55.

Giani, Carl, and **Harpke,** Ant. Posamentir-Arbeiten. Seide und Seidenwaaren. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 5.**

GIANTS, The hairy. *See* **Schooten,** Henry.

Gibbes, Robert Wilson. Mosasaurus and three allied genera; by. **Smiths'n contrib., v. 2.**

Gibbon, John. The artillerist's manual; compiled from various sources, and adapted to the service of the United States. *Illus.* 8°. *New York,* 1860.

Gibbons, David. The law of contracts for works and services. 12°. *London,* 1849–50. **Weale's series, No. 50.**

Gibbons, J. S. The public debt of the United States. Its organization; its liquidation; administration of the treasury; the financial system. 12°. *New York,* 1867.

Gibbs, George. Tribes of western Washington and northeastern Oregon. UNITED STATES. **Interior dept.** Geolog. survey. J. W. Powell.

Gibbs, James E. A. Interference between the application of Emery and Johnson and the patent granted to Gibbs. Argument of counsel. *See* **Pollok,** A.

Gibbs, John B. Decisions in the sewing machine cases of Potter and Wheeler vs. Gibbs, etc. *See* **Nelson,** S., and **Smalley,** D. A.

Gibbs, Joseph. Cotton cultivation in its various details, and barrage of great rivers, and instructions for irrigating, embanking, and tilling land in tropical and other countries possessing high thermomatic temperatures. 12°. *London,* 1862.

Gibbs, Wolcott. Report on physical apparatus and chemical materials. UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

——— and **Genth,** Frederick Augustus. Ammonia cobalt bases; by. **Smiths'n contrib., v. 9.**

Gibney, J. Treatise on the properties and medical application of the vapor bath, in its different varieties, and their effects in various species of diseased action. 8°. *London,* 1825.

Gibon. Dictionnaire des arts, etc.; par. *See* **Laboulaye,** C. P. L.

Gibson, John B., Life of. *See* **Porter,** William A.

Gibson, William. Institutes and practice of surgery. 2 v. 8th ed. 8°. *Philadelphia,* 1850.

Giebel, C., and **Heintz,** W. Zeitschrift für die gesammten Naturwissenschaften. *See* **Naturwissenschaftlicher.**

GIESSEN. Siebenter Bericht der oberhessischen Gesellschaft für Natur- und Heilkunde. *Illus.* 8°. *Giessen,* 1859.

Digitized by Google

Giffard, H. L'injecteur automoteur de. *See* **Reech.**

GIG-TREES, terrets, etc. *See* Tompkins, Samuel E., and co.

Gilbert's Annalen der Physik. *See* **Annalen.**

Gildemeister, Charles. New York Crystal palace: description of the building. *See* **Carstensen,** G.

GILDING. Kunst des Vergoldens, etc. *See* **Schmidt,** C. H. **133 Neuer Schauplatz der Künste.**

——— Kunst des Vergolders. *See* **Watin,** M. **207 Neuer Schauplatz der Künste.**

——— Manuel du doreur. *See* **Vergnaud,** A. D. **56 Manuels Roret.**

——— The painter, gilder, and varnisher's companion. *See* **Painter.**

——— Vergoldung und Versilberung. *See* **Elsner,** L.

——— Die Vergoldungskunst. *See* **Thon,** C. F. G. **87 Neuer Schauplatz der Künste.**

Giles, William F. United States circuit court, dist. of Maryland. In equity. Horace H. Day et al., complainants, vs. John Stellman et al., defendants. Opinion of Judge Giles; decision and final hearing, delivered at Baltimore, July 20, 1859. *New York*, 1859. pp. 25.

Gill, Edward L. The skater's manual: a complete guide to the art of skating. Rev. ed. 24°. *New York*, 1867. pp. 47.

Gill, Joseph. Improvements of the steam engine. **Weale's papers on engineering, v 1.**

——— Pneumatic locomotive engines, by. **Weale's papers on engineering, v. 2.**

Gill, Thomas. The technical repository, containing practical information on subjects connected with discoveries and improvements in the useful arts. v. 1-11, 1822-26. 8°. *London*, 1822-26.

Gill's technological repository; or, discoveries and improvements in the useful arts: being a continuation of his technical repository. v. 1-6, 1827-30. *London*, 1827-30

Gillespie, William Mitchell. A manual of the principles and practice of road making; comprising the location, construction and improvement of roads, (common, Macadam, paved, plank, etc.,) and railroads. 5th ed. 8°. *New York*, 1852.

——— A treatise on land surveying; comprising the theory developed from elementary principles; practice with the chain alone, the compass, the transit, the theodolite, and the plane table, etc.; with magnetic chart. *Illus.* 8°. *New York*, 1855. Same, 7th ed., 1859.

——— A treatise on levelling, topography and higher surveying. Ed. by Cady Staley. 8°. *New York*, 1872.

Gillet de Grandmont. Journal des connaissances usuelles et pratiques; publ. par. *See* **Journal.**

Gilliss, James M. Account of the total eclipse of the sun, Sept. 7, 1858, as observed near Olmos, Peru. **Smiths'n contrib., v. 2.**

Gillmore, Quincy A. Engineer and artillery operations against the defences of Charleston harbor in 1863, comprising the descent upon Morris island, the demolition of Fort Sumter, the reduction of forts Wagner and Gregg; with observations on heavy ordnance, fortifications, etc. With official reports of chief of artillery, assistant engineers, etc. *Illus.* 8°. *New York*, 1865.

——— Report of the siege and reduction of fort Pulaski. *See* UNITED STATES. **War dept.**

——— Report on béton aggloméré, or Coignet-béton; and the materials of which it is made. 8°. *Washington*, 1871.

Gilman, *Mrs.* Maria. My ten-rod farm; or, how I became a florist. 8°. *Boston*, 1869.

Gilroy, Clinton G. The art of weaving by hand and by power: with an introductory account of its rise and progress in ancient and modern times. *Illus.* 8°. *New York*, 1844.

——— Pastoral life and manufactures of the ancients; an account of their social state and attainments in the domestic arts, including spinning, dyeing, weaving, tapestry, lace and embroidery; also, their jeweled garments and fabrics of gold, purple, scarlet, silver, etc. 8°. *New York*, 1868.

——— **Talcot,** P., and **White,** George. Vollständiges Handbuch der Weberkunst in Baumwolle, Leinen, Wolle und Seide, mit Hand- und mit Maschinen-Webestühlen, sowol zur Anfertigung der glatten, als auch der geköperten und gemusterten Zeuge. Mit 33 Tafeln. 8°. *Weimar*, 1847. **157 Neuer Schauplatz der Künste.**

Digitized by Google

GIN. Manufacture and distillation of alcoholic liquors. *See* **Duplais,** *aîné et jeune.*

Gintl, Wilhelm Friedrich. Appreturmittel und Harzproducte. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 3.**

——— Zündwaaren. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 3.**

Giornale dell'I. R. istituto Lombardo di scienze, lettere ed arti. *See* MILAN.

Girard. Girard'sche Schiffsschleuse mit Schwimmer. *See* **Poncelet,** J. v.

Girard, Aimé. Dictionnaire de chimie industrielle. *See* **Barreswil,** C. L.

Girard, Charles. Catalogue of North American serpents. **Smiths'n misc. coll., v. 2.**

——— Contributions to the natural history of the fresh water fishes of North America. A monograph of the cottoids. For the Smithsonian institution. 4°. *Washington,* 1850.

——— Fresh water fishes of North America. **Smiths'n contrib., v. 3.**

Girard, Jules. La chambre noire et le microscope. Photomicrographie pratique. *Illus.* 2e éd. 8°. *Paris,* 1870.

Girardin, Jean Pierre Louis. Grundzüge der Landwirthschaft; nach dem Cours d'agriculture de. *See* **Hamm,** W.

——— Leçons de chimie élémentaire appliquée aux arts industriels, avec figures et échantillons de teintures et d'indiennes intercalés dans le texte. T. 1. Chimie inorganique. T. 2. Chimie organique. 8°. *Paris,* 1860–61.

Girault, Charles. Éléments de géométrie appliquée à la transformation du mouvement dans les machines. 8°. *Caen,* 1858.

GIRLS, Our. *See* **Lewis,** Dio.

GIRL'S own book, The. *See* **Child,** Lydia M.

Giroud, H. De la pression du gaz d'éclairage, et des moyens à employer pour la régulariser. 2e partie, texte. 4°. *Paris,* 1872.

Girton, Daniel. The new and complete pigeon fancier. New ed. rev. by William W. Thompson. 12°. *London, n. d.*

GLACIERS of the Alps. *See* **Tyndall,** J.

Gladden, Washington. Plain thoughts on the art of living; designed for young men and women. 12°. *Boston,* 1868.

Glaeser, T. Der praktische Branntweinbrennerei-Betrieb auf seinem gegenwärtigen Höhepunkte. 8°. *Leipzig,* 1862.

Glaisher, James. Philosophical instruments and processes. *See* **Lectures** on the results of the exhibition.

GLASGOW. Account of the Hutcheson bridge. By L. Hill. *See* **Weale, J. Theory of bridges, v. 1.**

——— Institution of engineers in Scotland, Transactions of. *See* **Institution.**

——— Mechanics' magazine, and annals of philosophy. New ed. v. 1–5. 8°. 1835–36.

GLASS. Art du vitrier. *See* **Doublette-Desbois. Encyclopédie populaire, v. 3.**

——— The art of. *See* **Blancourt,** H.

——— The art of. *See* **Neri,** Antonio.

——— blowing. Art du souffleur à la lampe. *See* **Danger,** T. P.

——— cutting. Glas zu sägen. *See* **Schulz,** F. O. K.

——— Glasindustrie. Von Jakob Falke und Ludwig Lobmeyr. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 9.**

——— Manuel du verrier. *See* **Julia de Fontenelle,** J. S. E. **101 Manuels Roret.**

——— Manufacture of. *See* **Porter,** G. R. **Lardner's cabinet cyclopædia, v. 132.**

——— Manufacture and uses of. *See* **History** of the processes of manufacture.

——— manufacture. Curiosities of glass making. *See* **Pellatt,** Apsley.

——— ——— Glasblasekunst. *See* **Schreiber,** E. **177 Neuer Schauplatz der Künste.**

——— ——— Die Glasfabrikation. *See* **Stein,** W.

——— ——— Glass making in all ages. By A. Sauzay. **Illustrated library of wonders, v. 2.**

——— ——— Handbuch der Glasfabrikation. *See* **Leng,** H. **79 Neuer Schauplatz der Künste.**

——— ——— Handbuch der Glasfabrikation, nach allen ihren Haupt- und Nebenzweigen. *See* **Graeger,** A. **283, 284 Neuer Schauplatz der Künste.**

——— painting (Ancient), and hints on glass painting. *See* **W.,** C.

——— ——— Art de la peinture sur verre. Par P. Le Vieil. PARIS. **Acad. des sc., arts et métiers, v. 44 and 13.**

Digitized by Google

GLASS painting, Art of. *See* **Fromberg, E. O. Weale's series, No. 41.**

——— ——— Art of. *See* **Gessert, M. A. Weale's series, No. 40.**

——— ——— Koloriren und Dekoriren von Porzellan, Glas, etc. *See* **Strele, Karl. 146 Neuer Schauplatz der Künste.**

——— ——— Ornamental glazing quarries, etc. *See* **Franks, Augustus W.**

——— Soluble. Bereitung des Wasserglases. *See* **Fuchs, J. N. von.**

——— ——— Wasserglas. *See* **S., F.**

——— Stained. *See* **Willement, Thomas.**

——— Staining and painting on glass. *See* **Whittock, N.**

——— Le verre; son histoire; sa fabrication. *See* **Peligot, Eugène.**

——— Le verrier du 19e siècle. *See* **Flamm, P.**

GLASSES, Designs for. *See* **Designs.**

Glauber, John Rudolph. A description of new philosopical furnaces, or a new art of distilling; whereunto is added a description of the tincture of gold, or the true "Aurum potabile." Set forth in English, by J. F. 8°. *London*, 1651.

GLAUBER salts. Fabrikation des Glaubersalzes. *See* **Rösling, C. W. 86 Neuer Schauplatz der Künste.**

GLAZING. Art du vitrier. Par P. Le Vieil. PARIS. **Acad. des sc., arts et métiers, v. 44 and 13.**

——— Glaziers' guide. *See* **Whittock, N.**

——— Manuel du vitrier. *See* **Vergnaud, A. D. 56 Manuels Roret.**

Gleig, George Robert. Lives of the most eminent British military commanders. v. 1-3. 16°. *London*, [1833]. **Lardner's cabinet cyclopædia, v. 67-69.**

Gleiwitz, George. Homœopathy, its nature and principles. 8°. *Bridgeport*, 1857. pp. 50.

Glenn, William W. Stair building. *See* **Vaughn, W. M.**

Gliddon, George R., and **Nott,** J. C. Indigenous races of the earth; or, new chapters of ethnological enquiry; including monographs, on special departments of philology, iconography, cranioscopy, palæontology, pathology, archæology, comparative geography and natural history, contributed by Alfred Maury, Francis Pulszky and J. Aitken Meigs; with communications from Joseph Leidy and Louis Agassiz. 4°. *Philadelphia*, 1857.

Glink, Leonhard. 48 moderne Fuss- und Parquet-Böden. Im Farbendruck. 4°. *München*, 1846.

GLOBE encyclopædia, The. *See* **Ross, John M.**

——— The English. *See* **Castlemain,** *Earl of.*

——— Lessons on the. *See* **Smith, Mary Howe.**

——— Past and present life of the. *See* **Page, D.**

GLOBES, The celestial and terrestrial. *See* **De Morgan, Augustus.**

——— A new treatise on the use of. *See* **Keith, Thomas.**

Glocker, Ernst Friedrich. Geognostische Beschreibung der preussischen Oberlausitz, etc. *Illus.* Text, 8°; atlas, fol. *Görlitz*, 1857.

Glogau, Ludwig, and **Pecz,** Alex. Wirkwaaren. Baumwollwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

GLOSSARY and etymological English dictionary. *See* **Toone, William.**

——— The Hallamshire. *See* **Hunter, Joseph.**

——— of terms applicable to marine engines and boilers. *See* **Tredgold, T. Steam engine, v. 3.**

——— of terms used in Grecian, Roman, Italian and Gothic architecture. *Illus.* 4th ed., enlarged. Part 1-2. 8°. *Oxford*, 1845.

Glossographia Anglicana nova; a dictionary, interpreting such hard words of whatever language, as are at present used in the English tongue, with their etymologies, definitions, etc. Also, the terms of divinity, law, physick, mathematicks, history, agriculture, logick, metaphysicks, grammar, poetry, musick, heraldry, architecture, painting, war, and all other arts and sciences herein explain'd, from the best modern authors, as Sir Isaac Newton, Dr. Harris, Dr. Gregory, Mr. Lock, Mr. Evelyn, Mr. Dryden, Mr. Blunt, etc. 8°. *London*, 1707.

Glover, Ralph. Truss and bandage institute. 8°. *New York*, 1853.

GLOVES. Fertige Kleider. Handschuhe. Von Franz und Max Stiasny. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 5.**

Digitized by Google

GLOVES. Handbuch der Handschuhfabrikation. *See* **Vollständiges. 84 Neuer Schauplatz der Künste.**

——— Manuel du fabricant de gants. *See* **Vallet d'Artois. 74 Manuels Roret.**

GLUE. Art de faire les colles. Par H. L. Duhamel du Monceau. PARIS. **Acad. des. sc., arts et métiers, v. 40 and 8.**

——— Die Leimfabrikation. *See* **Hagen, C.**

——— Der Leim- und Potaschensieder. *See* **Wölfer, M. 94 Neuer Schauplatz der Künste.**

Gluge, D. Gottlieb. Atlas of pathological histology. Transl. from the German by Joseph Leidy. *Illus.* fol. *Philadelphia,* 1853.

GLYCERINE and its uses, A monograph on. *See* **Hartshorne,** Henry.

——— Introduction and use of. *See* **Wilson,** G. F.

Glynn, Joseph. The indicator. *See* **Tredgold, T. Steam engine, 1st series.**

——— Rudimentary treatise on the construction of cranes, and machinery for raising heavy bodies, for the erection of buildings, and for hoisting goods. 12°. *London,* 1849. **Weale's series, No. 33.**

——— Rudimentary treatise on the power of water: as applied to drive flour mills and to give motion to turbines and other hydrostatic engines; with an appendix on centrifugal and rotary pumps. *Illus.* 12°. *London,* 1853. **Weale's series, No. 32-32*.**

Gmelin, Leopold. Handbook of chemistry. Transl. by Henry Watts. 14 v. v. 1. Cohesion, adhesion, affinity, light, heat, and electricity. v. 2. Non-metallic elements. v. 3-6. Metals. v. 7-14. Organic chemistry. 8°. *London,* 1848-60. **Cavendish society publications.**

Göbel, Carl Christian T. F. Agriculturchemie, für Vorträge auf Universitäten und in landwirthschaftlichen Lehranstalten. 8°. *Erlangen,* 1850.

Godecner, C. E. P. Fecundation and incubation of the eggs of fish. *See* **Fry,** W. H.

Godfrey, Ambrose. An account of the new method of extinguishing fires by explosion and suffocation; introduced by. 3d ed. 8°. *London,* 1744. pp. 20.

Godin, Louis. Table des matières contenues dans l'histoire, et les mémoires de l'académie. *See* **PARIS. Académie des sciences.**

Godson, Richard. A practical treatise on the law of patents for inventions and of copyright; illustrated by notes of the principal cases; with an abstract of the laws in force in different countries: with appendix and index. 8°. *London,* 1840.

——— Same. With supplement, bringing patent and copyright law down to the present time. 8°. *London,* 1851.

——— A supplement to a "Practical treatise on the law of patents for inventions"; with suggestions of many alterations, and an abstract of the laws in force in America, Spain, Austria, Netherlands and France. 8°. *London,* 1832.

Godwin, George. The builder; conducted by. *See* **Builder.**

Godwin, Parke. The cyclopædia of biography; a record of the lives of eminent persons; with a supplement, brought down to the present time, by George Sheppard. 12°. *New York,* 1866.

——— Vala; a mythological tale. 4°. *New York,* 1851.

Goethe, H. Wein-, Obst- und Gemüsbau. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 2.**

Goguet, Antoine Yvres. De l'origine des lois, des arts et des sciences, et de leurs progrès chez les anciens peuples. T. 1-3. 16e éd. 8°. *Paris,* 1820.

Göhren, C. T. v. Landwirthschaftliche Lehre. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 26.**

GOLD and silver, Art of assaying. *See* **Watherston, J. A.**

——— and silver, The mining and metallurgy of. *See* **Phillips, J. Arthur.**

——— deposits in Australia. *See* **Davison, S.**

——— equivalents, Tables of. *See* **Myers,** Oscar.

——— fields and mineral districts of Victoria. *See* **Smyth,** R. Brough.

——— foil, A treatise on the use of adhesive. *See* **Arthur,** Robert.

——— ores. Aufbereitung der geschwefelten Golderze in den Rocky-Mountains, etc. *See* **Reichenecker,** Albert.

——— working. The practical gold worker. *See* **Gee,** George E.

Goldene Buch (Das). Ein reichhaltiger Schatz, der neuesten bewährtesten und nützlichsten Rezepte und Vorschriften für die häusliche Oekonomie, die Landwirth-

Digitized by Google

Goldene—Continued.
schaft und das Gewerbswesen. 24°. *Bern*, 1848.

Golding, Robert. The shilling bee book; containing facts in the natural history of bees, with directions for bee management. 2d ed. 12°. *London*, 1848.

Goldsbury, John. Exercises and illustrations on the blackboard; an easy and expeditious method of giving instruction. 16°. *Keene, N. H.*, 1847.

Goldschmidt, S. Die chirurgische Mechanik, in ihrer Anwendung auf Bandagen, orthopädische Maschinen, künstliche Glieder, Apparate zur Krankenpflege und chirurgische Instrumente. Catalog und Preisverzeichniss. 8°. *Berlin*, 1863.

Goldschmidt, S., and **Hirsch,** J. Max. Leder-, Rauch- und Kürschnerwaaren. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 6.**

—— **Richter,** Carl, and **Fix,** Aut. Schuhwaaren. Schmuckfedern, etc. Tapezier-Arbeiten. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 5.**

GOLDSMITH. Designs for goldsmiths. *See* **Pugin,** A. W.

—— Goldschmiedeknust. Edelmetall- und Steinarbeiten. Von Jakob Falke. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 7.**

—— Der Gold- und Silberarbeiter. *See* **Schulze,** H. **8 Neuer Schauplatz der Künste.**

—— Handbuch für Gold- und Silberarbeiter. *See* **Burck,** A. **63 Neuer Schauplatz der Künste.**

—— Histoire de l'orfévrerie, joaillerie, etc. *See* **Lacroix,** Paul, and **Seré,** Ferdinand.

—— Kunst des Goldarbeiters. *See* **Kulmer,** Rudolf v. **8 Neuer Schauplatz der Künste.**

—— The practical gold worker, or goldsmiths and jewellers' instructor. *See* **Gee,** George E.

Gondret, Louis Franç is. Mémoire concernant les effects de la pression atmosphérique sur le corps humain, et l'application de la ventouse dans différens ordres de maladies. 18°. *Paris*, 1819..

Good, John Mason. The book of nature. 2d ed. 3 v. 8°. *London*, 1823.

Goodfellow, J. The merchant and shipmaster's ready calculator and complete pocket assistant for all concerned in the freight of goods. l. 8°. *London and Trenton*, 1804.

Goodfellow, J.—Continued.

Goode, G. Brown. Catalogue of the fishes of the Bermudas; based chiefly upon the collections of the United States national museum. 8°. *Washington*, 1876. UNITED STATES. **Interior dept. National museum. Bulletin 5.**

—— International exhibition, 1876. Board on behalf of United States executive departments. Classification of the collection to illustrate the animal resources of the United States. 8°. *Washington*, 1876. UNITED STATES. **Interior dept. National museum. Bulletin 6.**

Goodrich, Chauncey A. Dictionary of the English language; rev. by. *See* **Webster,** Noah.

Goodrich, S. G. The animal kingdom illustrated. 2 v. roy. 8°. *New York*, 1863.

Goodwin, Joseph. A new system of shoeing horses: with an account of the various modes practiced by different nations; more particularly a comparison between the English and French methods: observations on the diseases of the feet, connected with shoeing. 8°. *London*, 1820.

Goodyear, Charles. Application for extension of letters patent. Argument against said extension. *See* **Stoughton,** E. W.

—— Application for extension of letters patent; decision of the commissioner and order of extension. *See* **Holt,** J.

—— Application for extension of letters patent; report of examiner. *See* **Antisell,** T.

—— Circuit court U. S., dist. of N. J. In equity. Charles Goodyear vs. H. H. Day. 6 v. 8°. *New York*, 1852.

—— In the circuit court of the U. S., dist. of New Jersey, May term—1852. Charles Goodyear vs. Horace H. Day. Bill in equity; heard on pleadings and proofs. pp. 18. *n. t. p.*

—— Life and discoveries of. *See* **Peirce,** Bradford K.

—— A. G. Phelps and others, adsm. N. E. car spring co., and C. Goodyear. Motion for a preliminary injunction. *See* **Phelps,** A. G.

Goppelsröder, Friedrich. Ueber die chemische Beschaffenheit von Basel's Grund-, Bach-, Fluss- und Quell-Wasser,

Digitized by Google

Goppelsröder—Continued.
mit besonderer Berücksichtigung der sanitarischen Frage. 8°. *Basel*, 1867.
——— Ueber Petroleum und dessen Producte, nebst einem Anhange über Feuerlöschmittel. 8°. *Basel*, 1869.
——— Zur Infection des Bodens und Bodenwassers. 4°. *Basel*, 1872.

Gopsill's Philadelphia city directory, for 1875. Index to the residents of the entire city; their names, business and location; to which is added an appendix of useful information, of banks, etc.; with a valuable street index or guide. Compiled by Isaac Costa. 8°. *Philadelphia*, 1875. Also for 1876.

Gordon, Alexander. A treatise upon elemental locomotion, and interior communication, wherein are explained and illustrated the history, practice and prospects of steam carriages, the comparative value of turnpike roads, railways and canals. 3d edition containing a supplement, wherein are given rules and tables, and the description of an improved road surveying instrument, for determining the comparative values of different roads. 8°. *London*, 1836.

Gordon, G. W. Treatise on the cultivation of the sugar cane. *See* **Practical** treatises.

Gordon, George. The pinetum; being a synopsis of all the coniferous plants at present known, with descriptions, history and synonymes, comprising nearly one hundred new kinds. Assisted by Robert Glendinning. 8°. *London*, 1858.

Gordon, J. C. An unfailing guide to the genders of French nouns. 12°. *New York*, 1850. pp. 18.

Gordon, William. The economy of the marine steam engine; suggestions for its improvement, and notes on various subjects connected with steam. 8°. *London*, 1845. [2 copies.]

Gore, George, **Sparling,** M., and **Scoffern,** J. Practical chemistry; including the theory and practice of electro-deposition; photographic art, the chemistry of food, with a chapter on its adulterations; and the chemistry of artificial illumination. 8°. *London*, 1856. **Orr's circle of the sciences, v. 7.**

Gorham, John. Unfrequented paths in optics. Part 1st. Light from a pinhole; comprehending visual angle and the microscopic power of the eye. Reprinted from the Quarterly journal of microscopical science. *Illus.* 8°. *London*, 1855. pp. 31.

Gorham, J.—Continued.

Goritz. Atti e memorie dell'I. R. società agraria in Gorizia. Anno 7-9, 1867-70. 3 v. sm. 4°. *Gorizia*, 1867-70.
——— Gospodarski. 8°. 1869-70.
——— Pertrattazioni del primo congresso bacologico internazionale tenuto in Gorizia nei giorni 28 e 29 Novembre 1870. 8°. *Gorizia*, 1870.
——— Prospetto statistico della principesca contea di Gorizia e Gradisca. [One large sheet.] *Gorizia*, 1869.

Görlitz. Gewerbeverein zu Görlitz. Bericht. Von Erwin Lüders. B. 1-2, 1864-66. 4°. *Görlitz*, 1865-66.
——— ——— Verhandlungen. New series, B. 1-7, 1868-76. 8°. *Görlitz*, 1868-76——.
——— Naturforschende Gesellschaft zu Görlitz. Abhandlungen. B. 10-15. 8°. *Görlitz*, 1860-75——.
——— ——— Geognostische Beschreibung der preussischen Oberlausitz. *See* **Glocker,** E. F.

Gorup-Besanes, E. F. von. Anleitung zur qualitativen und quantitativen zoochemischen Analyse 8°. *Braunschweig*, 1871.
——— Lehrbuch der Chemie. B. 1. Anorganische Chemie. B. 2. Organische Chemie. B. 3. Physiologische Chemie. *Braunschweig*, 1859-62.

Gosse, Philip Henry. The aquarium: an unveiling of the wonders of the deep sea. 12°. *London*, 1854.
——— A handbook to the marine aquarium; containing practical instructions for constructing, stocking and maintaining a tank; and for collecting plants and animals. 24°. *London*, 1855.

Gotha, Almanach de. *See* **Almanach** de Gotha.

GOTHIC architecture. Elemente des Spitzbogenstiles. *See* **Möllinger,** K.
——— ——— A manual of Gothic moldings. *See* **Paley,** T. A.
——— ——— Principles of Gothic ecclesiastical architecture. *See* **Bloxam,** M. H.
——— ornaments. A series of examples. *See* **Colling,** J. K.

Gotthardt railway. Die Gotthardtbahn. *See* **Thommen,** A.

Digitized by Google

Gouge, Henry A. A new system of ventilation, etc. 3d ed. 8°. *New York*, 1870. [2 copies.]

Gouin and **Le Chatelier.** Experiments on locomotive engines. **Weale's papers on engineering, v. 6.**

Gould, Benjamin A. Adams' Latin grammar, with some improvements, and the following additions: rules for the right pronunciation of the Latin language: a metrical key to the odes of Horace: a list of Latin authors arranged according to the different ages of Roman literature: tables, showing the value of the various coins, weights, and measures, used among the Romans. 12°. *Philadelphia*, 1866. [†]

Gould, Benjamin A., *jr.* Defence of, by the scientific council. *See* **Henry,** J., **Bache,** A. D., and **Peirce,** B.

——— Reply to the "Statement of the trustees" of the Dudley observatory. 8°. *Albany*, 1859.

Gould, Lucius D. The American house carpenter and joiner's assistant; being a new and easy system of lines, founded on geometrical principles for cutting every description of joints. 2d ed. 4°. *New York*, 1855.

Gourcy, *Le Comte* Conrad de. Voyage agricole en Normandie, dans la Mayenne, en Bretagne, dans l'Anjou, la Tourraine, le Berri, la Sologne et le Beauvoisis. 8°. *Paris*, 1861-62.

Gourlier. Rapport sur les matériaux de construction et de décoration en substances minérales, naturelles et artificielles, fait à la commission française du jury international de l'exposition universelle de Londres. 8°. *Paris*, 1855.

Gourlier, Charles Pierre. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

Goutershausen, H. Welcker von. Ueber den Bau der Saiteninstrumente und deren Akustik, nebst Uebersicht der Entstehung und Verbesserung der Orgel. 8°. *Frankfurt am Main*, 1870.

Gouye, Thomas. Observations physiques et mathématiques envoyées des Indes et de la Chine; notes du P. *See* PARIS. **Académie** royale des sciences. Mémoires.

Gover, Henry Charles. Drawings of the patent polytint printing machine, with mechanical description and explanatory observations. 8°. *London*, 1853.

GOVERNMENT and constitutional law, A treatise on. *See* **Tiffany,** Joel.

Graeger, A. Handbuch der Glasfabrikation. 2 B. 8°. *Weimar*, 1868. **283-284 Neuer Schauplatz der Künste.**

Graff, E. G. Althochdeutscher Sprachschatz, oder Wörterbuch der althochdeutschen Sprache. B. 1-6. 4°. *Berlin*, 1834-42.

Graham, Andrew J., Biographical sketch of. From The New York era. 18°. *New York*, 1868. pp. 16.

Graham, Andrew J. Handbook of standard or American phonography. 5 parts. 12°. *New York*, 1858.

——— Phonetic spelling book: with full directions for teachers. 16°. *New York*, 1859. pp. 24.

Graham, G. F. English synonyms, classified and explained; with practical exercises. Designed for schools and private tuition. Ed. by Henry Reed. 16°. *New York*, 1867.

Graham, J. J. Elementary history of the progress of the art of war. 8°. *London*, 1858.

Graham, Sylvester. A treatise on bread and bread making. 24°. *Boston*, 1837.

Graham, Thomas. Elements of chemistry; including the applications of the science in the arts. 8°. *London*, 1842.

——— Elements of inorganic chemistry, including the applications of the science in the arts; ed. by Henry Watts and Robert Bridges. 2d Am. from 2d Lond. ed. *Illus.* 8°. *Philadelphia*, 1858.

Graham, William. Exercises on etymology, etc. 18°. *Edinburgh*, 1843.

GRAIN. Conservation des grains et farines. *See* **Sainte Fare Bontemps,** *Le Chev.*

——— Ensilage des grains. *See* **J.**

——— Lettre sur une manière de conserver les grains. *See* **Barbançois,** C. H. de.

——— Manuél du négociant en grains. *See* **Benoît,** P. M. N., and **Julia de Fontenelle,** J. S. E. **34 Manuels Roret.**

——— pits. Construction et l'emploi des silos dans le nord de la France. *See* **Arcet,** J. P. J. d'.

——— tables, Elwood's. *See* **Elwood,** James L.

——— trade. Enquête sur la révision de la législation des céréales en France. *See* **Enquête.**

Digitized by Google

GRAINER, marbler, and sign writer's assistant. *See* **Sutherland**, W.

GRAMMAR. A comparative grammar of the Sanskrit, Zend, Greek, Latin, Lithuanian, Gothic, German, and Sclavonic languages. *See* **Bopp**, T.

——— Grammatical analyzer. *See* **Tenney**, W. J.

——— Grammatical corrector. *See* **Hurd**, Seth T.

——— of the English tongue. *See* **Clark**, Hyde.

——— of Moors' language; a dialect of Hindostan. *See* **Hadley**, George.

——— Student's handbook of comparative. *See* **Clark**, Thomas.

GRAMMATOGRAPHY; a manual of reference to ancient and modern languages. *See* **Ballhorn**, F.

Grand junction railway co. Notes of the cause between W. E. Newton and the railway company for infringement. *See* **Newton**, W. E.

GRAND MENAN, Marine invertebrata of. By W. Stimpson. **Smiths'n contrib., v. 6.**

Grand trunk railway co., Statements, reports, and accounts of the. *See* CANADA.

Grandpré, Louis M. J. O. C. de. Der Schlossermeister, mit Inbegriff der Eisen- und Stahlbereitung und einem Anhang über den Bau der Brückenwaagen. Nach dem Französischen. 4te Aufl. Mit Beiträgen von J. G. Petri, C. H. Schmidt, T. A. Reimann, J. G. Buch, und F. Rathel. *Illus.* 8°. *Weimar*, 1843. **50 Neuer Schauplatz der Künste.**

——— Manuel du serrurier; par. *See* **B.** and others. **67 Manuels Roret.**

Grandvoinnet, Jules. Journal d'agriculture sous la direction de. *See* **Journal.**

Grant, E. B. Beet-root sugar and cultivation of the beet. 12°. *Boston*, 1866.

Grant, Robert. Biography of distinguished scientific men; transl. by. *See* **Arago**, D. F. J.

Grantham, John. Iron as a material for ship-building. 8°. *London*, 1842.

——— Iron ship-building: with practical illustrations. Text, 12°; pl., fol. *London*, 1858. **Weale's series, No. 54*.**

GRANTON pier. Plan of a harbor at Granton pier. By J. D. Boswall. *See* **Weale's papers on engineering, v. 3.**

GRAPE culture. *See* **Strong**, W. C.

GRAPE culture. The American grape grower's guide. *See* **Chorlton**, William.

——— ——— and wine making. *See* **Buchanan**, Robert.

——— ——— and wine making, American. *See* **Mead**, Peter B.

——— ——— Cultivation of the native grape. *See* **Husmann**, George.

——— ——— The grape culturist. *See* **Fuller**, Andrew S.

——— ——— Manual on the culture of the grape. *See* **Sayers**, E.

——— ——— Manuel du vigneron. *See* **Thiébaut de Berneaud**, A. **58 Manuels Roret.**

——— question, Both sides of the. *See* **Both sides, etc.**

——— vine, A practical treatise on the. *See* **Allen**, J. Fisk.

——— ——— (The); a practical treatise on its management. *See* **Mohr**, Frederick.

GRAPERY, The cold. *See* **Chorlton**, William.

GRAPES. Abbildungen der vorzüglichsten und hauptsächlichsten Traubensorten Württembergs. *See* **Single**, Christian.

——— and wine. *See* **Busby**, James.

——— and wine. Anweisung zur Construction einer neuen, verbesserten Trauben- und Saftpresse. *See* **Wölfer**, Marius.

GRAPHIC arts, Rise and progress of the. *See* **Donlevy**, J.

Grashof, F. Die Festigkeitslehre mit besonderer Rücksicht auf die Bedürfnisse des Maschinenbaus. 8°. *Berlin*, 1865.

——— Der Indicator; mit einem Vorworte von. *See* **Völckers**, J.

GRASSES and forage plants in the United States and British provinces. *See* **Flint**, Charles L.

——— Descriptio uberior graminum, etc. *See* **Muhlenberg**, D. Henrico.

——— Description and use of the British. *See* **Donaldson**, J.

GRASSHOPPERS, History of North American. **Smiths'n misc. coll., v. 2.**

Grattan, Thomas Colley. The history of the Netherlands. New ed. 16°. *London*, [1833.] **Lardner's cabinet cyclopædia, v. 55.**

GRATZ. Steiermärkisch-landschaftliche Ober-Realschule in Gratz. Jahresberichte für die Studienjahre. 11ter-14ter, 18ter, 19ter, 1862-65, 1869-70. 4° and 8°. *Gratz*, 1862-70.

Digitized by Google

Graves, Robert James. A system of clinical medicine: with notes and a series of lectures by W. W. Gerhard. 3d Am. ed. 8°. *Philadelphia,* 1848.

Gray, Andrew. The plough-wright's assistant; a practical treatise on various implements employed in agriculture. *Illus.* 8°. *Edinburgh,* 1808.

Gray, Asa. Botany; field, forest and garden. A simple introduction to the common plants of the United States east of the Mississippi, both wild and cultivated. 8°. *New York,* 1868.

—— First lessons in botany and vegetable physiology: to which is added a copious glossary of botanical terms. 8°. *New York,* 1866.

—— Introduction to structural and systematic botany and vegetable physiology. 5th rev. ed. of the botanical text-book. 8°. *New York,* 1858.

—— Manual of the botany of the northern United States; including Virginia, Kentucky, and all east of the Mississippi; arranged according to the natural system. The mosses and liverworts, by Wm. S. Sullivant. *Illus.* 2d ed. 8°. *New York,* 1856. Same, 4th ed., 1863.

—— Plantæ Wrightianæ Texano-Neo Mexicanæ. **Smiths'n contrib., v. 3 and 5.**

Gray, David. Poem by. *See* BUFFALO. **Young** men's association.

Gray, *Mrs.* Hamilton. Tour to the sepulchres of Etruria in 1839. 2d ed. 8°. *London,* 1841.

Gray, John. Philosophical transactions of the Royal society, v. 6; abridged by. *See* LONDON. **Royal** society.

Gray, John C. Essays, agricultural and literary. 12°. *Boston,* 1850.

Gray, Samuel F. The operative chemist, a practical display of the arts and manufactures which depend upon chemical principles. *Illus.* 2d ed. 8°. *London,* 1831.

Graydon's forms of conveyancing and of practice in the courts of common pleas, quarter sessions, oyer and terminer; the supreme and orphan's courts. 4th ed., with notes. 8°. *Philadelphia,* 1852. [†]

Great American repository of useful information for the million; containing legal and commercial instruction, directions for farming, gardening, cooking, letter-writing, etc. 8°. *New York,* 1860.

GREAT BRITAIN. Agricultural statistics. Report of the select committee of the house of lords appointed to inquire into the best mode of obtaining accurate statistics from all parts of the united kingdom. August 10, 1855. fol. *London,* 1855.

—— Board of agriculture. Communications on subjects relative to husbandry and internal improvement of the country. 5 v. 2d ed. *London,* 1804.

—— Board of health. Appendix "B" to the report on the epidemic cholera of 1848–49. By Mr. Grainger. 12°. *London,* 1850.

—— British costume, History of. *See* **Planché,** J. R.

—— British fishes, History of. *See* **Yarrell,** W.

—— British history to 1847. *See* **Wade,** J.

—— British museum, Report from the select committee of the house of commons, on the condition, management and affairs of the. June 6, 1836. fol. *London,* 1836.

—— Coal fields of. *See* **Hall,** E.

—— Colonial trade. Report of committee on foreign affairs. *See* UNITED STATES. **Congress.**

—— Commission to Paris exhibition, 1867. Catalogue of the British section; containing a list of the exhibitors of the United Kingdom and its colonies, and the objects which they exhibit. 8°. *London,* 1867.

—— Committee of council on education. 20th report of the science and art department, with appendices. 8°. *London,* 1873.

—— Convict prisons, Report on the discipline and management of. 1851. By C. B. Jebb. 8°. *London,* 1852.

—— Copyright of designs, Report of select committee on. July 6, 1840. fol. *London, n. d.*

—— Cotton manufacture. *See* **Montgomery,** J.

—— Cotton manufacture. *See* **Ure,** A.

—— Cotton manufacture, History of. *See* **Baines,** E., *jr.*

—— Cotton trade. *See* **Mann,** J. A.

—— Days at the factories. *See* **Dodd,** G.

—— Department of practical art, 1st report of. 8°. *London,* 1853.

—— Domesday book; or the great survey of England of William the conqueror, A. D. 1086. Fac-simile of the part relating

Digitized by Google

GREAT BRITAIN—Continued.

to Cornwall. Photo-zincographed. fol. *Southampton*, 1861.

——— Factories for the spinning and weaving of textile fabrics, abroad. Report of her majesty's secretaries of embassy and legation. 8°. *London*, 1873.

——— Factory system of. *See* **Ure, A.**

——— Farm insects of. *See* **Curtis, J.**

——— Funding system of United States and. *See* UNITED STATES.

——— Great seal patent office. Abridgments of all specifications of inventions, from the earliest enrolled to those published under the act of 1852. In classes and chronologically arranged. [Extending to 1866 inclusive.] Numbers 1–87. 100 v. 12°. *London*, 1857–76——. [For complete list of the abridgment of English patents, with alphabetical index, *see* **Patents**, English.]

——— ——— Alphabetical and subject matter indexes of patentees and patents of inventions in fire-arms, projectiles, etc., from May 15, 1718, to Dec. 31, 1852. 8°. *London*, 1854. pp. 50 and 24.

——— ——— Alphabetical index of patentees and applicants for patents of invention. [1st vol., 1617–1852; yearly vols., 1852–3 to 1870.] 19 v. imp. 8°. *London*, 1854–71.

——— ——— Appendix to specifications for reaping machines. *See* **Woodcroft, B.**

——— ——— Catalogue of the library. Part 1. Titles. Part 2. Index. imp. 8°. *London*, 1857–58.

——— ——— Chronological index of patents applied for and patents granted. [1st issue, 1617–1852 in 2 v.; yearly vols., 1852–3 to 1868.] 16 v. imp. 8°. *London*, 1854–69.

——— ——— Commissioners of patents' journal. [From the beginning in 1854 to 1876. One vol. each year to 1876. From 1873–76, bound in 2 vols. each year.] 8°. *London*, 1854–76——.

——— ——— Index to foreign scientific periodicals contained in the patent office library. v. 1–8, 1866–72. Printed and published by order of the commissioners of patents. roy. 8°. *London*, 1867–76.

——— ——— Indexes to the specifications of inventions in fire-arms, projectiles, etc., from May 15, 1718, to Dec. 31, 1853. 8°. *London*, 1854. pp. 50 and 24.

——— ——— Patent law amendment act, 1852. First and second set of rules and regulations. 8°. *London*, 1852. pp. 11.

GREAT BRITAIN. Great seal patent office. Reference index of patents of invention from March 2, 1617, to Oct. 1, 1852. 8°. *London*, 1855.

——— ——— Specifications of letters patent for inventions (including letters patent without specifications) recorded in the great seal patent office, and granted between March 1st (14 Jac. I.) A. D. 1617, and October 1st (16 Vict.) 1852; the earliest specification enrolled bearing date April 1st 1712. Edited by Bennet Woodcroft, superintendent of specifications, etc. Specifications, text, Nos. 1–14,359; plates, Nos. 169–14,359. Text, v. 1–408, imp. 8°. Plates, v. 3, 4, 6–408, fol. [Text and plates bound separately, and plates mounted on muslin. No plates to v. 1, 2, and 5.] *London*, 1853–58.

——— ——— Specifications of letters patent for inventions and provisional specifications filed and recorded in the office of the commissioners of patents for inventions, under the patent law amendment act 1852, (15 & 16 Vict., c. 83,) from October 1st 1852 to December 31st 1875. Specifications numbered annually. Text, imp. 8°. Plates on muslin, folio. Bound separately, and volumes numbered for each year. [About 80 specifications in each volume.] *London*, 1853–76.

CONTENTS.

[*New law series.*]

Year.	Specifications.	Vol. of text.	Vol. of plates.
1852	1–1211	1–17	1–17
1853	1–3045	1–42	1–42
1854	1–2764	1–35	1–35
1855	1–2958	1–37	1–37
1856	1–3106	1–37	1–37
1857	1–3200	1–36	1–36
1858	1–3007	1–38	1–38
1859	1–3009	1–36	1–36
1860	1–3169	1–38	1–38
1861	1–3276	1–39	1–39
1862	1–3490	1–43*	1–43*
1863	1–3309	1–41	1–41
1864	1–3260	1–40	1–40
1865	1–3386	1–42	1–42
1866	1–3453	1–42	1–42
1867	1–3723	1–46	1–46
1868	1–3991	1–50	1–50
1869	1–3786	1–46	1–46
1870	1–3405	1–45	1–45
1871	1–3529	1–44	1–44
1872	1–3970	1–51	1–51
1873	1–4294	1–53	1–53
1874	1–4492	1–58	1–58
1875	1–4561	1–57	1–57

[*Vol. 15, 1862, is omitted by error in numbering. Vol. 10 of same year is bound in 2 parts.]

——— ——— Same. From January 1, 1876.

Digitized by Google

GREAT BRITAIN. Great seal patent office—Continued.

New series. Specifications numbered annually. Text and plates bound together [plates on guards], 100 specifications in each volume. Imp. 8°. *London*, 1876–77——.

CONTENTS.

[*New series.*]

Year.	Specifications.	Vols.
1876	1–4200	1–42—*

[*Specifications received only to October 30, 1876. The rest not yet printed.]

——— Subject matter index of patents applied for, and patents granted. By Bennet Woodcroft. 1st issue, in two parts. Part 1, A–M, Part 2, N–Z, 1617–1852, entitled Subject-matter index (made from titles only) of patents of invention; thence yearly volumes, 1852–70. 21 v. 8°. *London*, 1854–71.

——— ——— Supplement to the series of letters patent and specifications of letters patent for inventions recorded in the great seal patent office, and granted between the 1st March (14 Jac., I.) A. D. 1617, and the 1st October (16 Vict.) A. D. 1852; consisting for the most part of reprints of scarce pamphlets, descriptive of the early patented inventions comprised in that series. Edited by Bennet Woodcroft. Imp. 8°. v. 1. 1858.

CONTENTS.

1. Metallica; or, the treatise of metallica, briefly comprehending the doctrine of diverse new metallical invention, etc. By Simon Sturtevant. *London*, 1612.
2. A treatise of metallica, but not that which was published by Mr. Simon Sturtevant, upon his patent, etc. By John Rovinson. *London*, 1613.
3. A commission directed to Sir Richard Wynne and others to inquire upon oath whether Nicholas Page or Sir Nicholas Halse was the first inventor of certaine kilnes for the drying of malt, etc. A. D. 1637.
4. Dud Dudley's metallum martis; or iron made with pit-coale, sea-coale, etc. *London*, 1665.
5. Description of the nature and working of the patent water-scoop wheels invented by William Wheler, as compared with the raising wheels now in common use. By J. W. B. Translated from the Dutch by Dr. Tolhausen. *London*, 1645.
6. An exact and true definition of the stupendous water-commanding engine, invented by the right honourable (and deservedly to be praised and admired) Edward Somerset, lord marquis of Worcester. *n. p., n. d.*
7. Navigation improved; or the art of rowing ships of all rates in calms, with a more easy, swift, and steady motion than oars can. By Thomas Savery. *London*, 1698.

GREAT BRITAIN—Continued.

8. The miner's friend; or an engine to raise water by fire described, etc. By Thomas Savery. *London*, 1702.
9. Specimina ichnographica; or a brief narrative of several new inventions and experiments, particularly the navigating a ship in a calm, etc. By John Allen, M. D. *London*, 1730.
10. A description and draught of a new invented machine for carrying vessels or ships out of or into any harbour, port, or river against wind and tide, or in a calm, etc. By Jonathan Hulls. *London*, 1737.
11. An historical account of a new method for extracting the foul air out of ships, etc., with the description and draught of the machines by which it is performed, etc. By Samuel Sutton, the inventor. To which are annexed two relations given thereof to the Royal society by Dr. Mead and Mr. Watson. *London*, 1747.

——— Letters patent. Abstract of the 15th and 16th Victoria, chap. 83, (incorporating the rules of the commissioners.) Patent law amendment act, 1852. By R. Prosser. 8°. *Birmingham*, 1852. pp. 8.

——— ——— Anno decimo quinto & decimo sexto Victoriae reginae. Cap. 83. An act for amending the law for granting patents for inventions July 1, 1852. fol. *London*, 1852. pp. 833–860.

——— ——— Anno decimo sexto & decimo septimo Victoriae reginae. Cap. 15. An act to amend certain provisions of the patent law amendment act, 1852, etc. fol. *London*, 1853. pp. 1513–1515.

——— ——— Anno decimo sexto Victoriae reginae. Cap. 5. An act to substitute stamp duties for fees on passing letters patent for inventions, etc. fol. *London*, 1853. pp. 17–20. *n. t. p.*

——— ——— English patent law. By C. Egan. *See* **Weale's papers on engineering, v. 4.**

——— ——— English patents: a register of all those granted for inventions during the first forty-five years of the present century. By Andrew Pritchard. 12°. *London*, 1847.

——— ——— A list of all the patents for inventions, in the arts, manufactures, etc., granted in England during the present century, including those now in force. By Andrew Pritchard. 12°. *London*, 1841.

——— ——— Patent law amendment act, 1852: laws, rules and regulations. fol. pp. 12. *n. p., n. d.*

——— ——— Patent law amendment act, 1852: the report of the commissioners of

Digitized by Google

GREAT BRITAIN. Letters patent—Continued. patents for inventions, etc. fol. *London*, [1855-56.]

——— ——— Report and minutes of evidence taken before the select committee of the house of lords, appointed to consider the bill intituled An act further to amend the law touching letters patent for inventions, etc. fol. *London*, 1851.

——— ——— Report from the select committee on the patent office library and museum. fol. *London*, 1864.

——— ——— Report of commissioners appointed to inquire into the working of the law relating to letters patent for inventions. fol. *London*, 1865.

——— ——— Table showing the number of patents for inventions granted in England and Wales, from 1617 to 1852: also patents granted and applied for in the United Kingdom of Great Britain and Ireland from Oct. 1, 1852, to Dec. 31, 1858. l. 8°. *London*, 1859.

——— Lives of British admirals. *See* **Southey**, R., and **Bell**, R. **Lardner's cabinet cyclopædia, v. 70-74.**

——— Lives of British dramatists. *See* **Dunham**, S. A., and others. **Lardner's cabinet cyclopædia, v. 96, 97.**

——— Lives of British lawyers. *See* **Roscoe**, H. **Lardner's cabinet cyclopædia, v. 75.**

——— Lives of British military commanders. *See* **Gleig**, G. R. **Lardner's cabinet cyclopædia, v. 67-69.**

——— Lives of British statesmen. *See* **Mackintosh**, *Sir* J., and others. **Lardner's cabinet cyclopædia, v. 76-82.**

——— Lives of the early writers of. *See* **Dunham**, S. A., and **Bell**, R. **Lardner's cabinet cyclopædia, v. 95.**

——— Lives of the English poets. *See* **Bell**, R. **Lardner's cabinet cyclopædia, v. 93, 94.**

——— Manufacture of iron in. *See* **Truran**, W.

——— Manufacture of iron in. *See* **Wilkie**, G.

——— Manufactures and machinery of. *See* **Barlow**, P.

——— Maps, plans, and engravings, referred to in reports and papers, printed by order of the house of commons. v. 3, 1758-1811. fol. *n. p., n. d.*

——— New York industrial exhibition; special report. *See* **Whitworth**, J.

GREAT BRITAIN. Surveyor-general of prisons. Report on the construction, ventilation and details of Pentonville prison, 1844. sm. fol. *London*, 1844.

——— progress in, History of. *See* **Philp**, R. K.

——— Progress of machinery and manufactures in. *See* **Progress.**

——— Progress of machinery and manufactures, exhibited in letters patent. *See* **Weale's papers on engineering, v. 5.**

——— The progress of the nation. *See* **Porter**, G. R.

——— Public libraries, Report from the select committee on. fol. *London*, 1850.

——— Public records, 6th report of the deputy keeper of. 3 v. fol. *London*, 1845-47.

——— Railways of. *See* **Whishaw**, T.

——— Sanitary condition of the labouring population, Report on. *See* **Chadwick**, Edwin.

——— Sewage of towns. Report of the commission appointed to inquire into the best mode of distributing and applying it to beneficial and profitable uses. 8°. *London*, 1865.

——— Small arms, Report from the select committee on. fol. *London*, 1854.

——— Statistics of the colonies of the British empire. *See* **Martin**, R. M.

——— Tagebuch eines Reisenden durch Grossbritannien. *See* **Auszug** aus dem Tagebuch.

——— West India survey. Report on the geology of Trinidad. By G. P. Wall and J. G. Sawkins. 8°. *London*, 1860.

GREAT exhibition, London, 1851. *See* LONDON; *also*, **Exhibitions**, Industrial.

——— inventors: the sources of their usefulness, and the results of their efforts. *Illus.* 8°. *London*, 1864.

GREAT SALT LAKE, Survey of the valley of the. *See* **Stansbury**, H.

GREAT WESTERN railway, Reports on a series of accidents and detentions on the. *See* CANADA.

GRECIAN tricks. Les tricheries des Grecs dévoilées. *See* **Robert-Houdin.**

GREECE. Arts of the Greeks and Romans. *See* **Fosbrooke**, T. D. **Lardner's cabinet cyclopædia, v. 45, 46.**

——— The Greek court in the Crystal palace. *See* **Scharf**, G. **Crystal palace library, v. 1.**

——— A history of. *See* **Smith**, William.

Digitized by Google

GREECE, History of. *See* **Thirlwall, C. Lardner's cabinet cyclopædia, v. 33–40.**

GREEK and English lexicon of the New Testament. *See* **Robinson**, Edward.

——— biography and mythology, Dictionary of. *See* **Smith**, W.

—— book, The first. *See* **Arnold**, Thomas K.

——— English lexicon. *See* **Liddell**, H. C., and **Scott**, R.

——— fire. Du feu grégeois, etc. *See* **Reinaud and Favé.**

——— ——— Researches concerning the Greek fire, and the introduction of gunpowder into Europe. *See* **Lalanne**, Ludovic.

——— for little scholars. The first Greek book of the pantographic series; published by the Philotechnic institute of Camden, N. J. sm. 4°. *Philadelphia*, 1866. pp. 30.

——— grammar, A. *See* **Buttmann**, Philip.

——— ——— The principles of. *See* **Bullions**, Peter.

——— language, A compendious grammar of. *See* **Morris**, Charles D.

——— ——— Grammar of the. *See* **Kühner**, Raphael.

——— ——— Introduction to the. *See* **Kendrick**, Asahel C.

——— ——— Rudiments of the. *See* **Rudiments.**

——— Ollendorff. *See* **Kendrick**, Asahel C.

GREEKS and Romans, Arts, manufactures, manners and institutions of the. 2 v. 12°. *London*, 1833–35. **Lardner's cabinet cyclopædia, v. 45, 46.**

——— Histoire des sciences mathématiques chez les Grecs. *See* **Sédillot**, L. P. E. A.

Greeley, Horace. Art and industry as represented in the exhibition at the Crystal palace, New York, 1853–'54, showing the progress and state of various useful and esthetic pursuits. From the N. Y. Tribune. Rev. and ed. by. 12°. *New York*, 1853.

Green, A. H. How coal and the strata in which it is found, are formed. **Science lectures for the people, series 2.**

Green, Francis H., and **Congdon**, Joseph W. Analytical classbook of botany. Part 1. Elements of vegetable structure and physiology. Part 2. Systematic botany. Illustrated by a flora of the northern states. sm. 4°. *New York*, 1855.

Green, Horace. A treatise on diseases of the air passages; comprising an inquiry into the history, pathology, causes, and treatment of those affections of the throat called bronchitis, chronic laryngitis, clergyman's sore throat, etc. roy. 8°. *New York and London*, 1846.

Green, Thomas. The universal herbal; a botanical, medical and agricultural dictionary, etc. 2d ed. 2 v. 4°. *London*, 1824.

Green, William Henry. An elementary Hebrew grammar, with tables, reading exercises and a vocabulary. 8°. *New York*, 1866.

Greene, G. W. Primary lessons in Italian. Ollendorff's method. 18°. *New York*, 1852.

Greene, J. Racy. Natural history review; ed. by. *See* **Natural history.**

Greene, Robert. The principles of the philosophy of the expansive and contractive forces; or an inquiry into the principles of the modern philosophy; that is, into the chief rational sciences which are extant; in seven books. fol. *Cambridge*, 1727.

Greener, William. Die Geheimnisse der englischen Gewehrfabrikation und Büchsenmacherkunst, so wie der Erzeugung der verschiedenen Eisensorten zu den feinsten Jagdgewehren. Aus dem Englischen übersetzt v. C. H. Schmidt. *Illus.* 8°. *Weimar*, 1842. **83 Neuer Schauplatz der Künste.**

——— The gun; or, a treatise on the various descriptions of small fire-arms. 8°. *London*, 1825.

——— Gunnery in 1858; a treatise on rifles, cannon and sporting arms; explaining the principles of the science of gunnery; describing the newest improvements in fire-arms. *Illus.* 8°. *London*, 1858.

——— Modern breech-loaders, sporting and military. 12°. *London*, 1870.

——— The sciences of gunnery, as applied to the use and construction of fire-arms. 8°. *London*, 1841.

GREENHOUSE; hot-house and stove. *See* **McIntosh**, Charles.

Greenleaf, Simon. A treatise on the law of evidence. v. 1–3. 8°. *Boston*, 1860.

Greenough, Horatio, A memorial of. *See* **Tuckerman**, Henry T.

Greenwood, James. The sailor's sea-book. Rudimentary treatise on naviga-

Digitized by Google

Greenwood, James—Continued.
tion; directions for great circle sailing; an essay on the law of storms and variable winds, and explanations of terms used in ship building. *Illus.* 12°. *London,* 1850. **Weale's series, Nos. 55, 56.**

Greenwood, J. G. Pneumatics; transl. by. *See* **Hero** of Alexandria.

Greenwood, William Henry. A manual of metallurgy. v. 1. Fuel, iron, steel, tin, antimony, arsenic, bismuth, and platinum. v. 2. Copper, lead, zinc, mercury, silver, gold, nickel, cobalt, and aluminium. 12°. *New York,* 1875. **Putnam's advanced science series, No. 19.**

GREENWOOD [cemetery]. A directory for visitors. *See* **Cleaveland,** N.

Grefe, Conrad, and **Jacobi,** Louis. Lithographie und Chromographie. Kupfer- und Stahlstich-Druck. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 12.**

Greff, Michel. L'école et la ferme, ou une lecture par semaine sur les travaux de l'année agricole. 24°. *Paris,* 1861.

Gregg, Rollin R. Synopsis of a forthcoming work upon consumption, and its numerous kindred maladies. 8°. *Buffalo,* 1865. pp. 33.

Gregg, Thomas. Fruit culture for the million. A handbook of fruit culture: being a guide to the cultivation and management of fruit trees—with an appendix. 12°. *New York,* 1857.

Gregori, —— de. Littérature et beaux arts. *See* **Écho** de la littérature.

Gregory, *Professor.* A dissertation on the influence of a change of climate in curing diseases. Transl. from the Latin, by W. P. C. Barton. 8°. *Philadelphia,* 1815.

Gregory, George. Lectures on the eruptive fevers, as now in course of delivery at St. Thomas' hospital in London. 1st American ed.; with notes, by H. D. Bulkley. 8°. *New York,* 1851.

Gregory, George W. Sewing machine attachments. A digest of patents granted in the United States. 4°. *Washington,* 1872.

Gregory, James J. H. Squashes: how to grow them; giving details, including keeping and marketing the crop. 12°. *New York,* 1867.

Gregory, Olinthus. Mathematics for practical men: a commonplace book of principles, theorems, rules and tables in various departments of pure and mixed mathematics. 2d ed. 8°. *London,* 1833.

—— A treatise of mechanics, theoretical, practical and descriptive. 4th ed. 3 v. v. 1–2, text; v. 3, plates. 8°. *London,* 1826.

Gregory, William. Animal chemistry; ed. by. *See* **Liebig,** J. v.

—— Chemistry of food; ed. by. *See* **Liebig,** J. v.

—— A handbook of organic chemistry: being a new edition of the Outlines of organic chemistry. 3d ed. 12°. *London,* 1852.

—— Oily acids; by. *See* **Turner,** E.

—— Outlines of chemistry for the use of students. 1st American from the 2d London ed.; rev. by J. Milton Sanders. 8°. *Cincinnati,* 1851.

—— Researches on magnetism; transl. and abbreviated by. *See* **Reichenbach,** K. v.

Gren, Franz A. K. Journal der Physik. *See* **Journal** der Physik.

Gressin-Dumoulin. Compte rendu de l'exposition en 1835. *See* BRUSSELS.

Greville, Robert Kaye. Scottish cryptogamic flora; colored figures and descriptions of cryptogamic plants, belonging chiefly to the order fungi; intended as a continuation of English botany. 6 v. [bound in 3]. 8°. *Edinburgh,* 1823–27.

Grey, R. Memoria technica, or method of artificial memory, applied and exemplified in chronology, history, geography, astronomy; also Jewish, Grecian and Roman coins, weights, measures; to which is subjoined Lowe's Mnemonics. 12°. *Oxford,* 1824.

Grier, William. The mechanic's calculator: comprehending principles, rules, and tables in the various departments of mathematics and mechanics, useful to millwrights, engineers and artisans. 12°. *Glasgow,* 1836.

—— Same. 12°. *Philadelphia,* 1839.

—— The mechanic's pocket dictionary: being a note book of technical terms, rules and tables in mathematics and mechanics. 12°. *Glasgow,* 1837. 14th ed., 1861.

Griffen, Augustus R. An essay on the botanical, chemical, and medical proper-

Digitized by Google

Griffen, Augustus R.—Continued.
ties of the fucus edulis of Linnæus. 12°. *New York,* 1816.

Griffin, John. A practical treatise on the use of the blow-pipe in chemical and mineral analysis; including systematic arrangement of simple minerals to aid the student in the discovery of the names of species. 12°. *Glasgow and London,* 1827.

Griffin, John Joseph. Chemical handicraft; a classified and descriptive catalogue of chemical apparatus suitable for class experiments for every process of chemical research. 8°. *London,* 1866.

——— Chemical recreations: a manual of experimental chemistry. 10th ed. 12°. *London,* 1854.

——— The chemistry of non metallic elements and their compounds; air, water, the gases, the acids; and a summary of organic chemistry, including a course of class experiments. 8°. *London,* 1860.

——— A system of crystallography, with its application to mineralogy. 8°. *Glasgow,* 1841.

Griffin, Joseph. Manuel de chimie amusante; par. *See* **Accum,** F., and others. **6 Manuels Roret.**

Griffin, William N. A treatise on optics. 2d ed. 8°. *Cambridge,* 1842.

Griffith, Allen A. A drill book for practice of the principles of vocal physiology, and acquiring the art of elocution and oratory. 8°. *Chicago,* 1868.

Griffith, F. A. The artilleri-t's manual and British soldier's compendium. 10th ed. 18°. *London,* 1868.

Griffith, John William. An elementary text-book of the microscope, including a description of the methods of preparing and mounting objects. 8°. *London,* 1864.

——— History of inventions, etc.; ed. by. *See* **Breckmann,** J.

——— and **Henfrey,** Arthur. The micrographic dictionary; a guide to the examination and investigation of the structure and nature of microscopic objects. *Illus.* 8°. *London,* 1856.

Griffith, Robert Eglesfield. American journal of pharmacy; ed. by. *See* **American.**

——— A universal formulary; containing methods of preparing and administering officinal and other medicines. New ed. by Robert P. Thomas. *Illus.* roy. 8°. *Philadelphia,* 1854. Later ed., 1859.

Griffiths, John Willis. The shipbuilder's manual and nautical referee. 2 v. *Illus.* 4°. *New York,* 1853.

——— Treatise on marine and naval architecture; or theory and practice blended in shipbuilding. *Illus.* 4°. *New York,* 1851.

Grimes, J. Stanley. Phreno-geology. The progressive creation of man, indicated by natural history. 12°. *Boston and Cambridge,* 1851.

Grimm, Jakob Ludwig Karl and Wilhelm Karl. Deutsches Wörterbuch. B. 1–3. 8°. *Leipzig,* 1854–60.

GRINDSTONES. Table of weights of grindstones, and rule for computing weights. *See* McDermott, J., and co.

Grinnell expedition in search of Sir John Franklin, The United States. *See* **Kane,** Elisha Kent.

Griscom, John. Catechism of practical chemistry; ed. by. *See* **Irving,** C.

Griswold, V. M. A manual of Griswold's new ferro-photographic processes for printing on ferrotype plates. 12°. *Peekskill, N. Y.,* 1866. pp. 14.

Gritzner, M. C. Engravings accompanying the report of the commissioner of patents for the year 1854. Arts and manufactures. v. 2, plates. 4°. *Washington,* 1855.

——— Specimen of a new plan of publishing the annual reports of the U. S. patent office. 4°. 1857. *n. t. p.* [2 copies.]

Groesbeck, John. The Crittenden commercial arithmetic and business manual. Abridged ed. 12°. *Philadelphia,* 1867.

Grollier de Servière, Gaspard. Recueil d'ouvrages curieux de mathématique et de mécanique; ou description du cabinet de Monsieur Grollier de Servière, avec des figures en taille douce, par M. Grollier de Servière, son petit fils. 4°. *Lyon,* 1719.

Grönland, Johannes, **Cornu,** Maxime, and **Rivet,** Gabriel. Des préparations microscopiques, tirées du règne végétal, et des différents procédés à employer pour en assurer la conservation. 8°. *Paris,* 1872.

Groom, Smith, Interference between the application of M. E. Hagan and the patent of. *See* **Keller,** C. M.

Gropelli, Emilio Serra. Sul tema proposto dalla Regia accademia di scienze, lettere ed arti in Modena. Le finanze

Digitized by Google

Gropelli, Emilio Serra—Continued.
dei comuni e delle provincie. 8°. *Firenze,* 1870.

Gros, J. B. Louis. Quelques notes sur la photographie sur plaques métalliques, en janvier 1850. 2e éd. *Illus.* 8°. *Paris* 1850.

Grose, Francis. A classical dictionary of the vulgar tongue. 8°. *London,* 1785.

——— Rules for drawing caricatures: with an essay on comic painting. 8°. *London.*

Gross, H. Comparative materia medica. Ed. by Constantine Hering. sm. 4°. *Philadelphia,* 1867.

——— A practical treatise on foreign bodies in the air passages. 8°. *Philadelphia,* 1854.

Gross, S. D. A practical treatise on the diseases, injuries and malformations of the urinary bladder, the prostate gland and the urethra. 2d ed., rev. 8°. *Philadelphia,* 1855.

——— A system of surgery; pathological, diagnostic, therapeutic, and operative. *Illus.* 2 v. 8°. *Philadelphia,* 1859.

Grossmann, Moritz. Preis-Schrift. Der freie Ankergang für Uhren, etc. 8°. Atlas, 4°. *Glashütte in Sachsen,* 1866.

Grossmith, William Robert. Amputations and artificial limbs. 12°. *London,* 1857.

Grothe, Hermann. Die Brennmaterialien und die Feuerungs-Anlagen für Fabrik, Gewerbe und Haus. Ein Compendium für Studirende, Techniker, Baubeflissene, Fabrikanten und Gewerbsleute. *Illus.* 8°. *Weimar,* 1870. **285 Neuer Schauplatz der Künste.**

——— Jahresbericht über die Fortschritte der mechanischen Technik und Technologie. Jahrg. 1–5. die Jahre 1861–66. *Illus.* 5 B. 8°. *Berlin,* 1863–66——.

——— Die Spinnerei, Weberei und Appretur auf der Weltausstellung zu Paris, 1867. *Illus.* 8°. *Berlin,* 1868.

——— Streichgarn-Spinnerei und Kunstwoll-Industrie. B. 1. Technologie der Gespinnstfasern. *Illus.* 8°. *Berlin,* 1876.

Grouvelle. Dictionnaire des arts, etc.; par. *See* **Laboulaye,** C. P. L.

Grouvelle and Jaunez. Guide du chauffeur et du propriétaire de machines à vapeur. 1e-2e partie. 4e éd. refondue; publication de Charles Laboulaye; avec atlas. 8°. *Paris,* 1858–59.

——— ——— and **Jullien,** C. E. Handbuch über den Bau, die Aufstellung, Behandlung, Bedienung, Heizung, Abwartung und Conservirung der Dampfmaschinen. Bearbeitet von Carl Hartmann. Mit einem Atlas. 8°. *Weimar,* 1847–48. **158, 159 Neuer Schauplatz der Künste.**

Grouvelle, Jaunez, and **Jullien**—Continued.

Grove, William Robert. The correlation and conservation of forces: a series of expositions, by Grove, Helmholtz, Mayer, Faraday, Liebig and Carpenter; with an introduction and brief biographical notices of the chief promoters of the new views by Edward L. Youmans. 8°. *New York,* 1865. pp. 42.

Grover and Baker sewing machine company. Decisions in the sewing machine cases of Grover & Baker S. M. Co. vs. G. B. Sloat and others, etc. *See* **Nelson,** S., and **Smalley,** D. A.

Gruber, Bernardus P. Horographia trigonometrica, seu methodus accuratissima arithmetice per sinus et tangentes horologia quævis solaria facili negotio describendi, et quædam alia, quæ Vialia dicuntur. sm. 4°. *Vetero-Pragae,* 1718.

Grüner, M. L. The manufacture of steel. Transl. from the French, by Lenox Smith; with an appendix on the Bessemer process in the United States. 8°. *New York,* 1872.

——— Studies of blast furnace phenomena. Transl., with an appendix, by L. D. B. Gordon. 12°. *London,* 1873.

Guénou, François. Explanation of Guénou's method. *See* **Flint,** C. L. **Milch** cows and dairy farming.

Guérin, Rapport sur le frein automoteur de. *See* **Piobert, Combes,** C., and **Couche,** C.

——— Un système de freins automoteurs par. *See* **Combes,** Charles.

Guest, Richard. A compendious history of the cotton manufacture; with a disproval of the claim of Sir Richard Arkwright to the invention of its ingenious machinery. 4°. *Manchester,* 1823.

Guhl, E., and **Koner,** W. The life of the Greeks and Romans, described from antique monuments. Transl. from 3d German ed. by F. Hueffer. 8°. *New York,* 1875.

Guibal. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

Guichard, J. Marie Théophile. Essai sur divers arts. *See* **L'Escalopier,** Charles de.

Digitized by Google

Guild, Reuben Aldridge. The librarian's manual; a treatise on bibliography, comprising a select and descriptive list of bibliographical works, to which are added sketches of public libraries. *Illus.* 4°. *New York,* 1858.

Guillaume, Rapport sur des expériences relatives à la charrue de. *See* **Yvart.**

Guillemin, Amédée. Applications of physical forces. Transl. from the French by Mrs. Norman Lockyer; ed., with additions and notes, by J. Norman Lockyer. roy. 8°. *London,* 1877.

——— The forces of nature; a popular introduction to the study of physical phenomena. Transl. from the French by Mrs. N. Lockyer; edited, with notes, by J. N. Lockyer. 8°. *New York,* 1872.

——— The heavens. An illustrated handbook of popular astronomy. Ed. by J. Norman Lockyer. 2d ed. roy. 8°. *London,* 1867.

Guillon. Méthode de l'architecture en voitures. obl. 8°. *Paris.*

Guizot, François Pierre Guillaume. Dictionnaire des langues française et allemande, par Guizot et autres. *See* **Mozin,** D. J.

Gumaer, P. E. Thoughts and contemplations in relation to the motions of the heavenly bodies. 12°. *New York,* 1851.

Gumbinner, L. Die Branntweinsteuer-Gesetzgebung. Gesetzliche Vorschriften über den Brennerei-Betrieb mit besonderer Rücksicht auf das Gebiet des Norddeutschen Bundes. 2te Abth. des praktischen Wegweiser zur Spiritus-Fabrikation. Hrsg. von A. Troschke. 8°. *Leipzig,* 1874.

——— Praktischer Wegweiser zur Spiritus-Fabrikation. Gegründet auf während sechsunddreissigjähriger Praxis gesammelte eigene Erfahrungen. Nebst einer Zusammenstellung der gesetzlichen Vorschriften für den Brennereibetrieb. 1ste Abth. 2te Aufl. *Illus.* 8°. *Leipzig,* 1872.

Gummere, John. An elementary treatise on astronomy. Part 1. Theory. Part 2. A number of practical problems. 4th ed. 8°. *Philadelphia,* 1851. 6th ed., 1854.

GUMS, Vegetable. Gummiarten, Harze und Balsame. *See* **Wiesner,** Julius.

GUN construction, Report on the mechanical properties of steel with reference to. *See* UNITED STATES. **War** department.

GUN-COTTON, Fabrication of. *See* **Dussauce,** H.

Gunn, John C. Domestic medicine; or poor man's friend, in the hours of affliction, pain and sickness. 8°. *New York,* 1846.

——— New family physician or home book of health; a complete household guide, with supplementary treatises on anatomy, physiology and hygiene. 8°. *Cincinnati,* 1864.

GUNNERY. Catechism, as applied to the service of naval ordnance. *See* **Brandt,** J. D.

——— Elements of. *See* **Hyde,** J. T.

——— in 1858: a treatise on rifles, cannon, and sporting arms. *See* **Greener,** W.

——— Instruction in. *See* **Benton,** J. G.

——— Naval. Report on the 32 pounder of 32 cwt. *See* **Dahlgren,** J. A.

——— ——— System of boat armament. *See* **Dahlgren,** John A.

——— ——— Theory and practice of. *See* **Jeffers,** W. N., *jr.*

——— ——— Treatise on. *See* **Douglas,** *Sir* H.

——— ——— Treatise on. *See* **Simpson,** E.

GUNPOWDER, Experiments on. *See* **Mordecai,** Alfred.

——— Initial action and force of fired. *See* **Thomas,** L.

——— Manufacture of. *See* **Anderson,** William.

——— Memoir on. *See* **Braddock,** John.

——— Des origines de la poudre à canon. *See* **Reinaud** and **Favé.**

GUNS, Breech-loading. *See* **Dodge,** W. C.

——— Instructions relating to. *See* **Hawker,** P.

——— Story of the. *See* **Tennent,** *Sir* J. S.

GUNSMITH. Beiträge zur Kenntniss der Büchsenmacherkunst. *See* **Schmidt,** J. **131 Neuer Schauplatz der Künste.**

——— Manuel de l'armurier. *See* **Desormeaux,** A. O. Paulin. **106 Manuels Roret.**

Gunter, Edmund. The works of; containing the description and use of his sector, cross-staff, bow, quadrant, and other instruments; with a canon of artificial sines and tangents, to a radius of 10,00000 parts, and logarithms from an unite to 10000. Diligently corrected, by Henry Bond. 4th ed. sm. 4°. *London,* 1662.

Digitized by Google

Gunther, Constantin. Electrochemische Feuervergoldung und Versilberung. 8°. *Dresden und Döbeln, n. d.* pp. 16.

Günther, F. A. Die Fabrikation des Lohgaren Leders in Deutschland auf ihrem jetzigen Standpunkte und deren nothwendige Fortschritte und Vervollkommnungen, nach den vom Verfasser persönlich gewonnenen Anschauungen und Erfahrungen auf der Pariser Welt-Industrie-Ausstellung von 1867, wie in den französischen Lederfabriken und Gerbereimaschinen-Werkstätten von. 2 Abtheilungen. *Illus.* 8°. *Weimar,* 1867. **282 Neuer Schauplatz der Künste.**

Günther, Friedrich August. Homöopatischer Thierarzt. Ein Hülfsbuch für Landwirthe, Pferdebesitzer und Hausväter. Erste amerikanische Auflage. 8°. *Weisenberg,* 1849.

Gurley, W. and L. E., A manual of the principal instruments used in American engineering and surveying, manufactured by. 12°. *Troy, N. Y.,* 1855.

Gurlt, E. Abbildungen zur Krankenpflege im Felde. Auf Grund der internationalen Ausstellung zu Paris im Jahre 1867. Text, 4°; atlas, imp. fol. *Berlin,* 1868.

Gustafsson, G. V. Practical observations on the present state of the steam-engine, in its application to marine purposes; pointing out its defects and suggesting means for improvement. To which is added a description of an engine to obviate most of those defects which exist in the marine engine. *Illus.* 8°. *London,* 1847. pp. 38.

Gutch's literary and scientific register and almanack for the years 1870, 1872, 1873. 24°. *London,* 1870–73. [2 copies.]

Güterbock, Carl. Bracton, and his relation to the Roman law; transl. by Brinton Coxe. 8°. *Philadelphia,* 1866.

GUTTA-PERCHA. Abridgments English Patents, No. 16. *See, also,* **Caoutchouc.**

——— Der Fabricant von Guttapercha-Waaren. *See* **Schmidt,** C. H. **227 Neuer Schauplatz der Künste.**

——— History of. *See* **Richardson,** W. H., *jr.* **Boot** and shoe manufacturer's assistant.

——— Vorkommen des Gutta-Percha. *See* **Harzen,** F. **201 Neuer Schauplatz der Künste.**

Gutteridge, William. A set of tables of all measures of capacity used generally or provincially within the dominions, at home or abroad of the British empire. 12°. *London,* 1825.

Guy, William A. Principles of medical jurisprudence, with so much of anatomy, physiology, pathology, and the practice of medicine and surgery, as are essential to be known by lawyers, coroners, magistrates, etc. 1st Amer. ed. by C. A. Lee. 8°. *New York,* 1845.

Guyot, Arnold. The earth and man. Lectures on comparative physical geography in its relation to the history of mankind. Transl. from the French by C. C. Felton. 12°. *Boston,* 1849.

——— Guyot's geographical series; primary. 4°. *New York,* 1866.

——— Tables, meteorological and physical, by. **Smiths'n misc. coll., v. 1.**

Gwilt, Joseph. An encyclopædia of architecture; historical, theoretical and practical. *Illus.* 8°. *London,* 1842.

GYMNASTIC apparatus. Turngeräthe und Turneinrichtungen. *See* **Kluge,** H. B.

——— exercises. *See* **Clias,** P. H.

——— ——— on the horizontal bar, parallel bars, double trapeze, etc. 32°. *New York,* 1866.

GYMNASTICS. Abbildungen von Turnübungen. *See* **Abbildungen.**

——— Golf, Curling. *See* **Chambers' useful hand-books, v. 2.**

——— In-door. *See* **Schreber,** Moritz.

——— New, for men, women and children. *See* **Lewis,** Dio.

GYPSUM. Kalk, Gyps und Cement. *See* **Böhmer,** Emil, and **Neumann,** Friedrich. **28 Neuer Schauplatz der Künste.**

H., J. C. The slang dictionary; or, the vulgar words, street phrases and fast expressions of high and low society. Many with their etymology, and a few with their history traced. 8°. *London,* 1865.

Haan, Ernst. Rumaenien. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Haardt, F. W., and **Rosthorn,** G. v. Stahl- und Eisenwaaren. Kupfer- etc. Erzeugnisse. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

Haas, Carl. Metallwaaren. Beleuchtungs-Apparate. Waffen. *See* VIENNA. **Gen.-**

Digitized by Google

Haas, Carl—Continued.
Dir. der Weltausst. 1873. Bericht. Gruppe 7.

HABERDASHERY and hosiery. *See* **Perkins,** E. E.

Habich, G. E. Die Schule der Bierbrauerei. Nebst einer Vorschule; die nöthigsten Vor- und Hülfskenntnisse in der Bierbraukunde. 8°. *Leipzig und Berlin,* 1863.

Hachette, Jean Nicolas Pierre. Traité élémentaire des machines. 2e éd. 4°. *Paris,* 1819.

Hackley, Charles W. A treatise on algebra; containing the latest improvements. 8°. *New York,* 1846.

——— A treatise on trigonometry, plane and spherical; with its application to navigation and surveying, nautical and practical astronomy, and geodesy. roy. 8°. *New York,* 1851.

Haddon, James. Examples and solutions in the differential calculus. 12° *London,* 1851. **Weale's series, No. 104.**

——— Rudimentary bookkeeping and commercial phraseology. 2d ed. 12°. *London,* 1854. **Weale's series, No. 83.**

Hadley, George. A compendious grammar of the current corrupt dialect of the jargon of Hindostan;—commonly called Moors; with a vocabulary. 7th ed. 8°. *London,* 1809.

HÆMASTATICS. Statical essays: containing hæmastatics, etc. *See* **Hales,** Stephen.

Hagan, William E. Interference between the application of Hagan and the patent of S. Groom. *See* **Keller,** C. M.

Hagar and co. Specimens (abridged) of printing types, ornaments, borders, etc., from the type foundry and printer's emporium of. 4°. *New York,* 1863.

Hagen, C. Die Leimfabrikation; praktische Anleitung zur leichten Herstellung aller Arten von Leim. 16°. *Berlin,* 1871.

Hagen, G. Handbuch der Wasserbaukunst. 1ster Theil: die Quellen. 2ter Theil 2: die Ströme. 2ter Theil 3: die Ströme und Kanäle. 3ter Theil: Das Meer. B. 1-3. Mit Kupfertafeln in Folio. 8°. *Königsberg,* 1847-64.

——— Seeufer- und Hafen-Bau. 4ter B. fol. 8°. *Berlin,* 1865.

——— Ueber das Gesetz, wonach die Geschwindigkeit des strömenden Wassers mit der Entfernung vom Boden sich vergrössert. 4°. *Berlin,* 1871.

Hagen, G.—Continued.

Hagen, Hermann. Synopsis of neuroptera. **Smiths'n misc. coll., v. 4.**

Hagen, Wilhelm, von Hagenburg. Entwurf einer Minentheorie, gemeinsam für Pulver und Dynamit, auf Grund physikalischer Gesetze, und über Holz- und Eisensprengungen mit Dynamit. 8°. *Wien,* 1875.

Hager, Hermann. Vollständige Anleitung zur Fabrikation künstlicher Mineralwässer. 8°. *Lissa,* 1860.

Hague, John. Steam navigation. Appendix "A" and "B" by. *See* **Tredgold,** T. **Steam** navigation.

HAGUE. Uittreksels uit vreemde tijdschriften voor de leden van het Koninklijk instituut van ingenieurs. 3 D. 8°. 1848-50. 6 D. 4°. 1851-58. [Bound in 7 v.] *Te 'S Gravenhage,* 1848-58.

——— Verhandelingen van het Koninklijk instituut van ingenieurs. D. 1-7, 1818-59. 8° and 4°. *Te 'S Gravenhage,* 1848-59.

Hahn, Eduard. Die wichtigsten der bis jetzt bekannten Geheimmittel, und Specialitäten, mit Angabe ihrer Zusammensetzung und ihres Werthes. 24°. *Berlin,* 1871.

Hahnemann, Samuel. Organon of homœopathic medicine. 3d Amer. ed. Dr. C. Hering's introductory remarks. 8°. *New York,* 1848.

Haidinger, Wilhelm. Sonder-Abdruck aus den Mittheilungen der geographischen Gesellschaft. 8°. *Wien,* 1871.

Haindl, Sebastian. Construction der Verzahnungen mit besonderer Rücksicht auf die beste Form der Zähne. *Illus.* 8°. *Stuttgart und Tübingen,* 1830. pp. 66.

——— Fortsetzung von Maschinenkunde und Maschinen-Zeichnung. Maschinen für den Strassen-, Wasser- und Brückenbau. Abth. 1. Die Wasser Förderung. *Illus.* 4°. *München,* 1854.

——— Die Maschinenkunde und Maschinenzeichnung. 4°; plates, fol. *München,* 1843.

——— Ueber Maschinen und Apparate zur Oel-Fabrikation. *Illus.* 8°. *München,* 1843. pp. 46.

Haines, Herbert. A manual of monumental brasses; comprising an introduction to the study of these memorials, and

Digitized by Google

Haines, Herbert—Continued.
a list of those remaining in the British isles. 2 v. *Illus.* 8°. *Oxford and London,* 1861.

Hainlen, K. Christian. Gemeinfaszliche natürliche Beschreibung Württembergs. Mit besonderer Beziehung auf die Landwirthschaft. 8°. *Stuttgart,* 1867.

HAIR. Art of ornamental hair work. *See* **S.,** F. L.

——— Handbuch der Frisirkunst. *See* **Villaret and Normandin. 42 Neuer Schauplatz der Künste.**

Hale, Edwin M. New remedies; their pathogenetic effects, and their therapeutical application in homœopathic practice. roy. 8°. *Detroit, Mich.,* 1864.

Hale, Sarah Josepha. The ladies' new book of cookery; with directions for carving, and arranging the table. 12°. *New York,* 1852.

——— Receipts for the million: containing four thousand five hundred and forty-five receipts, facts, directions, etc. 12°. *Philadelphia,* 1857.

Hales, Stephen. A description of ventilators; whereby great quantities of fresh air may with ease be conveyed into mines, goals, hospitals, workhouses, and ships, in exchange for noxious air. 8°. *London,* 1743.

——— Statical essays; containing hæmastatics; or, an account of some hydraulic and hydrostatical experiments made on the blood and blood vessels of animals. Also, an account of some experiments on stones in the kidneys and bladder; with an enquiry into the nature of those anomalous concretions. To which is added, an appendix, containing observations and experiments relating to several subjects in the first volume; the greatest part of which were read at several meetings before the Royal society. With an index to both volumes. 2d ed. 8°. *London,* 1740.

Haley, W. S. The daguerreotype operator; containing the most approved methods for producing daguerreotypes, with all the late improvements. 8°. *New York,* 1854.

Hall, Baynard K. Teaching a science; the teacher an artist. 12°. *New York,* 1848.

Hall, Edward H. Appleton's handbook of American travel; containing a full description of the principal cities, towns and places of interest; together with the routes of travel and leading hotels throughout the United States and British provinces. 9th ed. 12°. *New York,* 1867.

——— Appleton's handbook of American travel. The northern tour; being a guide through New York, Connecticut, Rhode Island, Massachusetts, Vermont, Maine, New Jersey, Delaware, Pennsylvania, Ohio, etc. 9th ed. 12°. *New York,* 1867.

Hall, Harrison. Hall's distiller; containing; 1. Full and particular directions for washing and distilling all kinds of grain. 2. A notice of the different kinds of stills. 3. A treatise on fermentation. 4. Directions for making yeast. 5. Allison's process of rectification. 6. Instructions for making all kinds of cordials. Adapted to the use of farmers as well as distillers. 8°. *Philadelphia,* 1813.

Hall, J. Sparkes. The book of the feet: a history of boots and shoes; hints to last-makers, and remedies for corns. From the 2d London ed., with a history of boots and shoes in the United States; biographical sketches of eminent shoemakers, and Crispin anecdotes. *Illus.* 12°. *New York,* 1847. [2 copies.]

Hall, Thomas. Handbook of fresh-water aquaria; ed by. *See* **Bishop,** J.

Hall, W. W. Bronchitis and kindred diseases, in language adapted to common readers. 12°. *New York,* 1852.

Hallbauer, A. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

——— Civilingenieur; hrsg. von. *See* **Civilingenieur.**

HALLE. Naturwissenschaftlicher Verein für Sachsen und Thüringen in Halle. Zeitschrift für die gesammten Naturwissenschaften. Redigirt von C. Giebel und W. Heintz. B. 4-46. 8°. *Berlin,* 1854-76——.

——— Das Wasserwerk der Stadt Halle, erbaut in den Jahren 1867-68. Beschreibung der Vorarbeiten, der Projectirung des Baues und der bisherigen Betriebs-Resultate. Herausgegeben von B. Salbach, Ingenieur. 4°; pl., fol. *Halle,* 1871.

Halleck, Henry Wager. Bitumen; its properties, etc. *See* UNITED STATES. **War dept. Papers on engineering.**

Digitized by Google

Halleck, Henry Wager. Elements of international law, and laws of war. 8°. *Philadelphia*, 1866.

Halleur, G. C. Hermann. The art of photography. With hints on the locale best suited for photographic operations, and on the proper posture, attitude and dress, for portraiture by F. Schubert. Appendix, containing brief explanations of the chemical terms. Transl. from the German, by G. L. Strauss. 12°. *London*, 1854. **Weale's series, No. 79**.

——— Die Kunst der Photographie. Nebst einem Anhang über die Stellung und Kleidung der zu portraitirenden Personen. Von Maler F. Schubert. 8°. *Leipzig*, 1853.

Halliwell, James Orchard. A collection of letters, illustrative of the progress of science in England, from the reign of Queen Elizabeth to that of Charles II. roy. 8°. *London*, 1841.

——— A dictionary of archaic and provincial words, obsolete phrases, proverbs, and ancient customs, from the 14th century. 5th ed. 2 v. 8°. *London*, 1865.

——— Rara mathematica; or, a collection of treatises on the mathematics, and subjects connected with them, from ancient, inedited manuscripts. 8°. *London*, 1839.

Hallowell, Benjamin. Geometrical analysis; or, the construction and solution of various geometrical problems from analysis. 8°. *Philadelphia*, 1872.

HALLUCINATIONS; or the rational history of apparitions, dreams, visions, etc. *See* **Brierre de Boismont, A.**

Hallus, Franciscus, alias Linus. Explicatio horologii, in Horto Regio Londini, in Anglia; an. 1669 erecti. sm. 4°. *Leodii Eburonum*, 1673. [Liege or Lüttich.]

Hallwachs, Wilhelm. Jahresbericht über die Fortschritte der Chemie. *See* **Liebig, J. v., and Kopp, H.**

Halma, François. Le grand dictionnaire françois et flamand. T. 1-2. 4°. *Amsterdam*, 1733.

Halsted, Edward Pellew. Iron-cased ships; a series of lectures. 8°. *London*, 1862. *n. t. p.*

Ham, John. The theory and practice of brewing, from malted and unmalted corn, and from potatoes. 2d ed. *Illus.* 12°. *London*, 1830.

Hamberger, Heinrich. Lustfeuerwerkerei; bearb. von. *See* **Büttner, F. C. A., and Chertier, F. M. 92 Neuer Schauplatz der Künste.**

Hamelin-Bergeron, P. Manuel du tourneur; revu par. *See* **Bergeron, L. E.**

Hamerton, Philip Gilbert. Etching and etchers. 8°. *London*, 1868.

Hamilton, Frank Hastings. A treatise on military surgery and hygiene. 8°. *New York*, 1865.

Hamilton, George. A short account of the steam engine, and of its inventors. 8°. *Edinburgh, n. d.* pp. 43.

Hamilton, J. A. Dictionary of musical terms; comprising an explanation of Italian, French, German, English, and other musical terms, phrases, and abbreviations; also, a list of musical characters. 12°. *New York*, 1866.

Hamilton, Schuyler. History of the national flag of the United States of America. 12°. *Philadelphia*, 1852.

Hamilton, W. J. Geography; by. *See* **Herschel, *Sir* J. F. W. Manual** of scientific enquiry.

Hamilton, *Sir* William, Philosophy of; arranged and ed. by O. W. Wright. 8°. *New York*, 1853.

Hamm, Wilhelm. Die Grundzüge der Landwirthschaft, nach dem Cours élémentaire d'agriculture von Girardin und Breuil selbstständig bearbeitet. B. 1-2. *Illus.* 8°. *Braunschweig*, 1850–53.

——— Illustrirter Katalog der Londoner Industrie-Ausstellung von 1862. 2 B. 4°. *Leipzig*, 1863–64.

——— Illustrirter Katalog der Pariser Industrie-Ausstellung von 1867. 4°. *Leipzig*, 1868.

——— Illustrirtes Recept-Handbuch der praktischen Destillation, für Industrie, Land- und Hauswirthschaft. 8°. *Leipzig*, 1863.

——— Die landwirthschaftlichen Theile der Weltausstellung zu Paris im Jahre 1855. Ein Bilder-Album der neuesten und nutzbarsten Maschinen und Geräthe den Landwirthschaft. Mit einem Anhange: Die europäische Nützthierschau. *Illus.* 4°. *Leipzig*, 1856.

——— Die landwirthschaftlichen Geräthe und Maschinen Englands. Mit besonderer Berücksichtigung der landwirthschaftlichen Mechanik und einer Uebersicht der Verhältnisse der englischen

Digitized by Google

Hamm, Wilhelm—Continued.
Agricultur. *Illus.* 8°. *Braunschweig,* 1845. 2te Aufl., 1856.

——— Die neuesten und nutzbarsten Geräthe und Maschinen für Land- und Hauswirthschaft. 1stes Heft. *Illus.* 4°. *Leipzig,* 1850. pp. 16.

Hammond, Nathaniel. The elements of algebra. 8°. *London,* 1773.

Hammond, William A. Military, medical, and surgical essays, prepared for the United States sanitary commission. roy. 8°. *Philadelphia,* 1864.

——— Physiological memoirs. 8°. *Philadelphia,* 1863.

——— The psychological and medico-legal journal; a monthly review of diseases of the mind and nervous system, and of medical jurisprudence. *See* **Psychological,** etc.

——— The quarterly journal of psychological medicine and medical jurisprudence. *See* **Quarterly** journal.

——— Sleep and its derangements. 12°. *Philadelphia,* 1869.

——— A treatise on hygiene, with special reference to the military service. 8°. *Philadelphia,* 1863.

——— Wakefulness; with an introductory chapter on the physiology of sleep. 12°. *Philadelphia,* 1866.

Hampel, J. C. G. Handbuch für Maurer und Steinhauer; umgearb. von. *See* **Matthaey,** C. **22, 23 Neuer Schauplatz der Künste.**

——— Handbuch der Zimmerleute; bearb. von. *See* **Matthaey,** C. L. **47-49 Neuer Schauplatz der Künste.**

——— Die Restauration alter und schadhaft gewordener Gemälde in ihrem ganzen Umfange; nebst einer Anleitung zur Frescomalerei. 8°. *Weimar,* 1846. **147 Neuer Schauplatz der Künste.**

Hannamann, Josef. Zucker-Apparate für Zuckerfabriken. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 4.**

Hancock, Thomas. Personal narrative of the origin and progress of the caoutchouc, or india-rubber manufacture in England, to which is added some account of the plants from which caoutchouc is obtained, its chemical analysis, statistical tables, etc.; with an appendix, containing specifications of the author's patents. *Illus.* 8°. *London,* 1857.

Hancock, Walter. Narrative of twelve years' experiments, (1824–1836,) demonstrative of the practicability and advantage of employing steam carriages on common roads: with engravings and descriptions of the different steam carriages constructed by the author, his patent boiler, wedge-wheels, and other inventions. 8°. *London,* 1838.

HAND, The book of the. *See* **Craig,** A. R.

HAND-RAILING. Carpenter's guide in stair-building and hand-railing. *See* **O'Neill,** Patrick.

——— ——— Practical stair-builder. Art of building stairs and handrails. *See* **Loth,** C. Edward.

——— railing, Treatise on. *See* **Reynolds,** L. E.

——— turning. *See* **Campin,** Francis.

Handbook of taste in book binding. New ed. 8°. *London, n. d.* pp. 31.

——— of the engrafted words of the English language, embracing the choice Gothic, Celtic, French, Latin, and Greek words. Part 1. Materials of the orthography. Part 2. Studies in the orthography. Part 3. English etymology. By a literary association. 12°. *New York,* 1854.

——— of turning; containing instructions in concentric, elliptic and eccentric turning; also, various plates of chucks, tools and instruments; directions for the use of the eccentric cutter, drill, vertical cutter, and circular rest. 2d ed. 18°. *London, n. d.*

——— of young artists and amateurs in oil painting, from the manual of Bouvier, with additions from Mérimée, de Montabert and others. With critical vocabulary. By an American artist. 7 parts. Part 1. Materials and implements of the art. Part 2. Certain matters holding a middle place between the materials and practice. Part 3. The first palette, or dead coloring. Part 4. Second or finishing palette. Part 5. The painting of draperies. Part 6. Landscape painting. Part 7. The varnishing, cleaning, repairing, and lining of pictures. 12°. *New York,* 1845.

——— to the special loan collection of scientific apparatus. 8°. *London and New York,* 1876. **South Kensington art and science handbooks, No. 9.**

Handmaid (The) to the arts. Vol. the first (2d ed.) teaching materia pictoria, devices, gilding: volume the second,—inks, engraving, glass, porcelain, papier maché. 8°. *London,* 1764–68.

Digitized by Google

Handy, Washington R. Text book of anatomy and guide to dissections. 8°. *Philadelphia*, 1854.

Haney, J. C. Art of memory; how to make a bad memory good, and a good memory better. 24°. *New York*, 1866.

Hann, James. The elements of plane trigonometry. 2d ed. 12°. *London*, 1854. **Weale's series, No. 91.**

——— The elements of spherical trigonometry. 12°. *London*, 1849. **Weale's series, No. 92.**

——— Examples on the integral calculus. 12°. *London*, 1850. **Weale's series, No. 103.**

——— Index to treatise on the steam engine. *See* **Tredgold,** T. **Steam** engine, 1st series, v. 1.

——— A rudimentary treatise on analytical geometry and conic sections. 12°. *London*, 1850. **Weale's series, No. 90.**

——— Theory of bridges, by. *See* **Weale,** J. **Theory** of bridges, v. 1.

——— and **Gener,** Placido and Justo. The steam engine for practical men; containing a theoretical investigation of the various rules given in the work, and several useful tables. 8°. *London*, 1854.

Hanna, J. S. Hanna's ready reckoner, and log book. Rev. ed. 24°. *Lock Haven*, 1868.

Hannak, Emanuel. Unterricht in der Geschichte. *See* VIENNA. **Gen.-Dir. d Weltausst. 1873. Bericht. Gruppe 26.**

Hannover, Adolph. De la construction et de l'emploi du microscope. 8°. *Paris*, 1855.

HANOVER. Architecten- und Ingenieur-Verein für das Königreich Hannover. Beiträge zur Förderung der Kunst in den Gewerken; hrsg. von. Ister B. 1872. fol. *Hannover*, 1872.

——— ——— Die mittelalterlichen Baudenkmäler Niedersachsens; hrsg. von. fol. *Hannover*, 1864.

——— ——— Zeitschrift. Neue Folge des Notiz-Blattes. Redigirt von dem Vorstande des Vereins. B. 1-22. 4°. *Hannover*, 1855-76——.

——— Die 13te Versammlung deutscher Architecten und Ingenieure. Abgehalten vom 3. bis 6. Sept. 1862 zu Hannover. 8°. *Hannover*, 1863.

——— Gewerbe-Verein für das Königreich

HANOVER—Continued.

Hannover. Mittheilungen. Jahrg. 1-24. 4°. *Hannover*, 1853-76——.

——— ——— Monatsblatt. 8°. *Hannover*, 1861-62. *n. t. p.*

Hanriot. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

Hansard, George Agar. The book of archery; the complete history and practice of the art, ancient and modern, and an account of the existing toxophilite societies. 8°. *London*, 1841.

Hansard, T. C. The art of printing, its history and practice from the days of John Guttenberg. 8°. *Edinburgh*, 1851.

——— Treatise on printing and type-founding; from the 7th ed. of the Encyclopædia Britannica. 8°. *Edinburgh*, 1841.

Hansen, Lewis G. Tables for French exchange, shewing the equivalent rates for currency as compared with gold. 2d ed. 24°. *New York*, 1869.

Hantute. Du libre échange et des résultats que l'adoption de ce système aurait pour l'agriculture, le commerce, l'industrie, et la marine de la France. 8° *Paris*, 1847.

Hanus, P. A., and **Biston,** Valentine. Manuel du charpentier. 3e éd. *Illus.* 18°. *Paris*, 1834. **76 Manuels Roret.**

HARBORS. Improvement of the port of London. *See* LONDON, Port of.

——— Mode of providing sufficient accommodation for the trade and shipping of the port of London. *See* LONDON, Port of.

——— on the south eastern coast. By W. M. Higgins. **Weale's papers on engineering, v. 2.**

——— Page's report on Holyhead and Porthdyn-llaen. **Weale's papers on engineering, v. 3.**

——— Report on Holyhead and Porthdyn-llaen. By Sir J. Rennie. **Weale's papers on engineering, v. 2.**

Harding, George. Report of the case of George B. Sloat, assignee of William W. Woodworth, vs. Charles A. Spring et al. Issues out of chancery. 8°. *Philadelphia*, 1851.

Harding, J. D. Drawing models and their uses. 18°. *London*, 1854.

Hardware, A catalogue of. *See* **Sargent** and co.

Hardwich, T. Frederick. A manual of photographic chemistry, including the collodion process. 8°. *London*, 1855.

Digitized by Google

Hardwich, T. Frederick—Continued.
Also, 3d ed., 1856; 4th ed., 1857; 6th ed., 1861.

Hardwicke's science-gossip; an illustrated medium of interchange and gossip for students and lovers of nature. Edited by M. C. Cooke and J. E. Taylor. v. 1–11, 1865–76. 8°. *London*, 1866-76——.

Hare, Robert. A compendium of the course of chemical instruction in the medical department of the university of Pennsylvania. Ed. by Franklin Bache. 3d ed. 8°. *Philadelphia*, 1836.

—— On the explosiveness of nitre. **Smiths'n contrib., v. 2.**

Hare, W. R. On the search for a dinner. 18°. *London*, 1857.

Harel, Charles. Falsifications des substances alimentaires. *See* **Garnier,** J. J., and **Harel,** C.

Harlan, Richard. Fauna Americana; being a description of the mammiferous animals inhabiting North America. 8°. *Philadelphia*, 1825.

Harless, Emil. Beiträge zu einer wissenschaftlichen Begründung der Lehre vom Mienenspiel. 4°. *München*, 1855. pp. 26.

—— Grenzen und Grenzgebiete der physiologischen Forschung. 4°. *München*, 1860. pp. 28.

—— Maasbestimmung der Polarisation durch das physiologische Rheoscop. 4°. *München*, 1861. pp. 44.

—— Molekuläre Vorgänge in der Nervensubstanz. 4°. *München*, 1858.

—— Maasbestimmung der Reizbarkeit im Allgemeinen und bei der Quellung insbesondere. 4°. *München*, 1860.

—— Die statischen Momente der menschlichen Gliedmassen. 4°. *München*, 1857. pp. 28. 2te Abhandlung, pp. 38.

—— Theorie und Anwendung des Seitendruckspirometers, eines neuen Instrumentes zur Bestimmung der Respirationsluft. 4°. *München*, 1855 pp. 31.

—— Zur inneren Mechanik der Muskelzuckung und Beschreibung des Atwood'schen Myographion. 4°. *München*, 1862.

Harley, William. The Harleian dairy system: an account of the various methods of dairy husbandry pursued by the Dutch; also, a new and improved mode of ventilating stables; with an appendix, containing useful hints for the management of hedge-row fences, fruit trees, etc.; and the means of rendering barren land fruitful. 8°. *London*, 1829.

HARMONICS. Descrizione degl'instromenti armonici. *See* **Bonanni,** *Padre.*

HARMONIES of nature, or the unity of creation. *See* **Hartwig,** G.

HARNESS. Abridgments English Patents, No. 34.

—— making. Album der Musterzeichnungen für Riemer. *See* **Album.**

—— —— Album für Riemer. *See* **Album.**

—— —— Art du bourrelier. Par F. A. P. de Garsauet. PARIS. **Acad. des sc., arts et métiers, v. 14 and 32.**

—— —— Carriage builders and harness makers' art journal. *See* **Carriage** builders.

—— —— Handbuch des Riemers und Sattlers. *See* **Ciliax,** J. C. **64 Neuer Schauplatz der Künste.**

—— —— Manuel du bourrelier. *See* **Lebrun. 61 Manuels Roret.**

Harney, George E. Barns, outbuilding and fences. 4°. *New York*, 1870.

Harney, John H. An algebra, upon the inductive method of instruction. 9th ed. 8° *Louisville*, 1840.

HARP, The history of. *See* **Aptommas.**

Harper, John. The sea-side, and aquarium; or, anecdote and gossip on marine zoology. 16°. *Edinburgh*, 1858.

Harper's Bazar. A repository of fashion, pleasure, and instruction. v. 1–9, 1868–76. fol. *New York*, 1868–76——.

—— handbook, for travellers in Europe and the east; by W. Pembroke Fetridge. 6th year. 12°. *New York*, 1867. [†]

Harpke, Anton, and **Giani,** Carl. Seide und Seidenwaaren. Posamentir-Arbeiten. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 5.**

Harrer, A. Muster-Sammlung für Bau- und Meubeltischler: fortgesetzt von. *See* **Krug,** E.

Harris, Chapin A. American journal of dental science. *See* **American** journal.

—— A dictionary of dental science, biography, bibliography, and medical terminology. 8°. *Philadelphia*, 1849.

—— A dictionary of medical terminology, dental surgery and collateral sciences. 3d ed. rev. by F. J. S. Gorgas. roy. 8°. *Philadelphia*, 1867.

Digitized by Google

Harris, Chapin A. The principles and practice of dental surgery. 5th ed. rev. *Illus.* 18°. *Philadelphia,* 1853. 7th ed., 1858.

Harris, Charles H. History of the Venango oil regions: showing where petroleum is found; the production of petroleum; the effect of the repeal of the government tax on crude petroleum; the location, depth, average production and ownership of all the wells on the Central petroleum company, etc. 12°. *Titusville, Pa.,* 1866.

Harris, Elisha. Progress of improvement in ventilation. *See* **Reid,** D. B.

Harris, John. The pre-Adamite earth: contributions to theological science. 3d ed. 12°. *Boston,* 1850.

Harris, Joseph. Country gentleman; ed. by. *See* **Country** gentleman.

Harris, Luman H. Mnemonics; or philosophical memory. 18°. *Newark,* 1846.

Harris, Sullivan D. Ohio cultivator; ed. by. *See* **Ohio** cultivator.

Harris, T. Application of atmospheric pressure to railways. **Weale's papers on engineering, v. 4.**

Harris, Thaddeus William. A treatise on some of the insects of New-England, which are injurious to vegetation. 8°. *Cambridge,* 1842. 2d ed., 1852.

——— Same, New ed. Ed. by Charles L. Flint. *Illus.* 8°. *Boston,* 1862.

Harris, William Snow. On the nature of thunderstorms; and on the means of protecting buildings and shipping against the destructive effects of lightning. 8°. *London,* 1843.

——— Rudimentary electricity; an exposition of the general principles of electrical science and the purposes to which it has been applied, with extracts from the Cavendish papers. 3d ed. 12°. *London,* 1853. **Weale's series, No. 7.**

——— Rudimentary treatise on galvanism, and the general principles of animal and voltaic electricity. With brief notices of the purposes to which it has been applied. 16°. *London,* 1853.

——— A treatise on lightning conductors: compiled from a work on thunderstorms; by Lucius Lyon. 2d ed. 12°. *New York,* 1855.

——— and **Noad,** H. M. Rudimentary magnetism; a concise exposition of the general principles of magnetical science. 2d ed. 12°. *London,* 1872.

Harrison, J. J. and E. Manual of science and arts; ed. by. *See* **Manual.**

Harrison, Joseph. An essay on the steam boiler. 18°. *Philadelphia,* 1867.

Hart, George. The violin; its famous makers, and their imitators, with engravings from photographs, of the works of Stradivarius, Guarnerius, and others. 8°. *London,* 1875.

Hart, J. Die Werkzeugmaschinen der Maschinenfabriken zur Metall- und Holzbearbeitung. Mit Atlas. 8°. fol. *Mannheim,* 1864.

Hart, John S. In the school-room. Chapters in the philosophy of education. 8°. *Philadelphia,* 1868.

Hartel, Wilhelm. Universitäten. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Harthausen, August. Studien über die innern Zustände, das Volksleben und insbesondere die ländlichen Einrichtungen Russlands. B. 1–3. 8°. *Hannover,* 1847–52.

Hartig, Ernst. Die Dampfkessel-Explosionen. Beiträge zur Beurtheilung der Massregeln für ihre Verhütung. 8°. *Leipzig,* 1867.

——— Versuche über den Kraftbedarf der Maschinen in der Flachs- und Wergspinnerei. 8°. *Leipzig,* 1869.

——— Versuche über Leistung und Arbeits-Verbrauch der Werkzeugmaschinen. 8°. *Leipzig,* 1873.

Harting, P. Das Mikroskop. Theorie, Gebrauch, Geschichte und gegenwärtiger Zustand desselben. B. 1–3. 8°. *Braunschweig,* 1866.

Hartley, F. W. Gas measurement and gas meter testing under the gas act. 3d ed. 16°. *London,* 1873.

Hartley, Walter Noel. Air, and its relation to life, etc. 12°. *New York,* 1875.

Hartmann, Carl Friedrich Alexander. Angaben und Pläne theils schon ausgeführter, theils gut ausführbarer englisch-amerikanischer Mahlmühlen, sowie von den neuesten Einrichtungen der Oel-, Papier-, Loh- und Sägemühlen. *Illus.* 8°. *Weimar,* 1850. **181 Neuer Schauplatz der Künste.**

——— Aufbereitung und Verkokung der Steinkohlen, so wie die Vorbereitung, Verkokung und Verkohlung der Braunkohlen und des Torfes. *Illus. Weimar,*

Digitized by Google

Hartmann, C. F. A.—Continued.
1858. **237 Neuer Schauplatz der Künste.**

——— Berg- und hüttenmännischer Atlas oder Abbildungen und Beschreibungen vorzüglicher, ausgeführter und im Betriebe stehender Bergwerks- und Hütten-Maschinen und Apparate. Nebst einer Uebersicht der Fortschritte des Berg- und Hütten-Maschinenwesens. *Illus.* 4°; pl., fol. *Weimar*, 1860.

——— Civilingenieur; hrsg. von. *See* **Civilingenieur.**

——— Erfindungen über Feuerungs-Anlagen, u. s. w.; bearb. v. *See* **Péclet, J. C. E. 212 Neuer Schauplatz der Künste.**

——— Fortschritte des Eisenhüttengewerbes in der neueren Zeit, oder der heutige Standpunkt der Roheisen-, Stabeisen- und Stahlfabrikation. Nebst kurzer Entwickelung der neuesten quantitativen Eisenhüttenproduction. *Illus.* Text, 8°; plates, l. 8°. *Leipzig*, 1858.

——— Fortschritte des Steinkohlen-Bergbaues in neuester Zeit, oder der heutige Standpunkt der Aufsuchung, Gewinnung und Förderung der mineralischen Brennstoffe. Nebst kurzer Entwickelung der neuesten quantitativen Stein- und Braunkohlen-Production. *Illus.* 8°. *Berlin*, 1859.

——— Grundsätze der Dampfmaschinen; Abth. 1, 2, bearbeitet von. *See* **Verdam, G. J. 69-71 and 100 Neuer Schauplatz der Künste.**

——— Grundsätze der Feuerungskunde; deutsch bearb. von. *See* **Péclet, J. C. E. 142 Neuer Schauplatz der Künste.**

——— Handbuch der Bergbau- und Hüttenkunde. *Illus.* 4°. *Weimar*, 1858.

——— Handbuch der Eisenhüttengewerbskunde, oder systematische Darstellung der Roheisen-, der Stabeisen- und der Stahlfabrikation auf ihrem jetzigen Standpunkte. Für Eisenhütten- und Staatsmänner, Fabrikanten, Berg- und Gewerbs-Lehranstalten, etc. *Illus.* 8°. *Leipzig*, 1860.

——— Handbuch der Metallgiesserei. Nebst Anhang über das Emailliren und Verzinnen gusseiserner Gefässe. *Illus.* 8°. *Weimar*, 1840. **103 Neuer Schauplatz der Künste.**

——— Handbuch der Mikroskopie; deutsch bearb. v. *See* **Quekett, J. 180 Neuer Schauplatz der Künste.**

Hartmann, Carl Friedrich Alexander. Handbuch der Mühlenbaukunst; umgearb. v. *See* **Weinholz, W. 57, 58 Neuer Schauplatz der Künste.**

——— Handbuch der praktischen Metallurgie oder Darstellung der Gewinnung und Verarbeitung der in den Künsten und Gewerben nutzbaren Metalle. 2 B. *Illus.* 8°. *Weimar*, 1847. **80, 81 Neuer Schauplatz der Künste.**

——— Handbuch der Pulverfabrikation sowie der Schiessbaumwolle- und Schiesshede-Bereitung. *Illus.* 8°. *Weimar*, 1847. **113 Neuer Schauplatz der Künste.**

——— Handbuch des Baumwollen-Manufacturwesens; übers. v. *See* **Ure, A. 93 Neuer Schauplatz der Künste.**

——— Handbuch des Eisenbahnwesens; bearb. v. *See* **Ritchie, R. 152 Neuer Schauplatz der Künste.**

——— Jahresbericht über die Fortschritte der Bergbaukunst im Jahre 1859. 1. Jahrg. 8°. *Leipzig*, 1860.

——— Journal für Metallarbeiter; hrsg. von. *See* **Voigt, B. F.**

——— Kunst der Strassenerleuchtung; bearb. v. *See* **Péclet, J. C. E. 40 Neuer Schauplatz der Künste.**

——— Lehre von den electrischen Telegraphen; deutsch bearb. v. *See* **Lardner, D. 228 Neuer Schauplatz der Künste.**

——— Die Lehren der Statik, u. s. w.; deutsch v. *See* **Newth, S. 190 Neuer Schauplatz der Künste.**

——— Locomotiven-Führer; aus dem Franz. v. *See* **Flachat,** E., and others. **127 and 192 Neuer Schauplatz der Künste.**

——— Maschinenbauer; deutsch bearb. v. *See* **Le Blanc. 143-145 and 196 Neuer Schauplatz der Künste.**

——— Mühlenbaukunst; umgearb. von. *See* **Schlegel,** C. F.

——— Neues Journal der Gerberei; hrsg. v. *See* **Voigt,** B. F.

——— Neueste Fortschritte und Vervollkommnungen der Gasbeleuchtung. *Illus.* 8°. *Weimar*, 1850. **182 Neuer Schauplatz der Künste.**

——— Das Nothwendige der Dampfmaschinen; bearbeit v. *See* **Burn, R. S. 224 Neuer Schauplatz der Künste.**

——— Der Ofenbaumeister und Feuermechanist; umgearb. von. *See* **Matthaey, C. L. 51 Neuer Schauplatz der Künste.**

Digitized by Google

Hartmann, Carl Friedrich Alexander. Papierfabrication; deutsch bearb. v. *See* **Planche, G. 205 Neuer Schauplatz der Künste.**

——— Practische Anleitung zur Anlage und Benutzung gegrabener und artesischer Brunnen. 2te Aufl. *Illus.* 8°. *Weimar,* 1848. **124 Neuer Schauplatz der Künste.**

——— Der practische Puddel- und Walzmeister 2te Aufl. *Illus.* 8°. *Weimar,* 1858. Later ed., 1861. **241 Neuer Schauplatz der Künste.**

——— Die Probirkunst, oder Anleitung, die wichtigsten Metallgemische auf dem trocknen und nassen Wege zu untersuchen. Nach Chaudet: L'art de l'essayeur, deutsch bearbeitet. 2te Aufl. 8°. *Weimar,* 1847. **97 Neuer Schauplatz der Künste.**

——— Rauchverzehrende Oefen; deutsch bearb. von. *See* **Combes,** C., and **Viollet,** J. B. **226 Neuer Schauplatz der Künste.**

——— Das Schleifen und Poliren der Werkzeuge; deutsch bearbeitet von. *See* **Holtzapfel,** C. **200 Neuer Schauplatz der Künste.**

——— Der treue Führer beim Schürfen; oder die äussern Kennzeichen und Merkmale der Lagerstätten, wo mit guter Aussicht bergmannische Schürf- und Bohrversuche auf Erzgänge, Steinkohlen- und Braunkohlen-Flötze, Steinsalz, Torf, Braunstein, Salzquellen etc. unternommen werden können. Nach Combes, De goussée, Mohs, Tunner, Villefosse und Andern herausgegeben. *Illus.* 8°. *Weimar,* 1848. **160 Neuer Schauplatz der Künste.**

——— Ueber Auffindung, Gewinnung und Förderung der mineralischen Brennstoffe, namentlich des Torfs, der Braun- und der Steinkohle. Nach Burat, Combes, Gätzschmann, Villefosse, J. C. W. Voigt, u. A. *Illus.* 8°. *Weimar,* 1848. **167 Neuer Schauplatz der Künste.**

——— Ueber den Asphalt; übers. v. *See* **Huguenet, I. 154 Neuer Schauplatz der Künste.**

——— Vollständige Brennmaterialkunde. Nebst Bemerkungen über die dabei erlangten Nebenproducte, als des Holzsigs, Theers, etc., und mit Anhängen über die Gewinnung der Knochenkohle, über die Wirkung der Brennmaterialien und über die allgemeinen Grundsätze der Heizung. Nach eignen Erfahrungen und den besten Hülfsmitteln bearbeitet. *Illus.* 8°. *Weimar,* 1847. **112 Neuer Schauplatz der Künste.**

Hartmann, C. F. A.—Continued.

——— Vollständiges Handbuch der Metalldreherei. *Illus.* 8°. *Weimar,* 1851. **186 Neuer Schauplatz der Künste.**

——— Vollständiges Handbuch der Steinarbeiten. Nebst einem Anhange über künstliche Steinmassen. *Illus.* 8°. *Weimar,* 1854. **206 Neuer Schauplatz der Künste**

——— Die Waagen und ihre Construction. Nebst einem Anhange: die Gewichtssysteme verschiedener Länder; sowie deren Vergleichung mit dem französischen metrischen Gewicht. *Illus.* 8°. *Weimar,* 1856. **231 Neuer Schauplatz der Künste.**

——— Werkzeugslehre; bearbeitet von. *See* **Holtzapfel, C. 178, 179 Neuer Schauplatz der Künste.**

——— Der wohlunterrichtete Hohofen- und Hammermeister. *Illus.* 8°. *Weimar,* 1848. **161 Neuer Schauplatz der Künste.**

——— Zeitschrift für Chaisenfabrikanten, u. s. w.; hrsg. v. *See* **Voigt,** B. F.

——— Zeitschrift für Klempner, u. s. w.; hrsg. v. *See* **Voigt,** B. F.

——— Zeitung für Dampfmaschinenkunde, u. s. w. *See* **Voigt,** B. F.

——— and **Schmidt,** Christian Heinrich. Praktisches Handbuch des Wollmanufacturwesens. *Illus.* 8°. *Weimar,* 1848. **122 Neuer Schauplatz der Künste.**

Hartmann, Ludwig, and others. Kurzwaaren-Industrie. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 10.**

Hartshorn et al. vs. Horace H. Day. [Caoutchouc.] *See* UNITED STATES. **Supreme court.**

Hartshorne, C. The home book. *See* **Valentine, R.**

Hartshorne, Henry. A conspectus of the medical sciences. 8°. *Philadelphia,* 1869.

——— Essentials in the principles and practice of medicine. 8°. *Philadelphia,* 1867.

——— A handbook of human anatomy and physiology. 8°. *Philadelphia,* 1869.

——— A monograph on glycerin and its uses. 18°. *Philadelphia,* 1865.

Digitized by Google

Hartwig, G. The aerial world; a popular account of the phenomena and life of the atmosphere. 8°. *New York*, 1875.

——— The harmonies of nature; or, the unity of creation. 8°. *New York*, 1866.

——— The tropical world; a scientific account of the natural history of the animal and vegetable kingdoms, in the equatorial regions. 8°. *London*, 1863.

HARVEST of the sea, The. *See* **Bertram,** James G.

HARVESTERS. Concours de machines à moissonner. *See* FOUILLEUSE.

Harvey, William Henry. Nereis Boreali-Americana. **Smiths'n contrib., v. 3, 5, and 10.**

Harwell, H. I. The domestic manual: or, family directory; containing receipts in arts, trades and domestic economy. 12°. *New-London*, [1816.]

Harzer, Friedrich. Der geschickte Grob- und Hufschmied, nebst einem Anhange über das Schmieden der Aexte, Beile, Ankerwerkzeuge und andern gröbern Schneidwerkzeuge, sowie einem Wörterbuche des Schmiedes. *Illus.* 8°. *Weimar*, 1848. **169 Neuer Schauplatz der Künste.**

——— Die Glockengiesserei mit ihren Nebenarbeiten. *Illus.* 8°. *Weimar*, 1854. **214 Neuer Schauplatz der Künste.**

——— Guttapercha und Kautschuk. Ihr Vorkommen, ihre Eigenschaften und ihre Verarbeitung. Nach den besten in- und ausländischen Hülfsmitteln bearbeitet. *Illus.* 8°. *Weimar*, 1853. **201 Neuer Schauplatz der Künste.**

——— Die Magnet-Electricität als motorische Kraft. *Illus.* 8°. *Weimar*, 1849. **175 Neuer Schauplatz der Künste.**

——— Die Operationen der Electro-Chemie; übers. v. *See* **Brandely,** A. **174 Neuer Schauplatz der Künste.**

——— Die Siegellackfabrikation. 8°. *Weimar*, 1848. **170 Neuer Schauplatz der Künste.**

——— Der Strassen-, Eisenbahn-, Canal-, Brücken-, Küstendamm-, Deich- und Hafenbau, sowie die Bewässerungsarbeiten. *See* **Lixante,** A. **189 Neuer Schauplatz der Künste.**

——— Die Turbinen oder horizontalen Wasserräder. *Illus.* 8°. *Weimar*, 1851. **187 Neuer Schauplatz der Künste.**

——— Vollständiges Handbuch der Münzkunst, mit Einschluss des Medaillen-Prägens, der Scheidung des Goldes und Silbers aus ihren Legirungen, der Gravir- und Stempelschneidekunst, der Knopffabrication und anderer dahin gehörigen Arbeiten der Gold- und Silberarbeiter, der Gürtler, u. s. w. Nebst einleitenden Bemerkungen über die Eigenschaften und die Gewinnung des Goldes, Silbers, Kupfers, und einiger wichtigen Legirungen der selben und anderen Metalle. *Illus.* 8°. *Weimar*, 1855. **216 Neuer Schauplatz der Künste.**

——— Der wohlunterrichtete Drahtzieher, Nadler und Drahtarbeiter. Nach den besten Hülfsmitteln bearbeitet. *Illus.* 8°. *Weimar*, 1851. **188 Neuer Schauplatz der Künste.**

Haskel, Daniel. Universal gazetteer; ed. by. *See* **McCulloch,** J. R.

——— and **Smith,** John Calvin. A complete description and statistical gazetteer of the United States of America, with an abstract of the census and statistics for 1840. 8°. *New York*, 1845.

Haskins, R. W. Art and artists. 8°. *Buffalo*, 1851.

Haskoll, W. Davis. The assistant engineer's railway guide; to which has been added ten sets of experiments on the strength of materials, by George Rennie; and three plates and specifications illustrative of the construction and details of the laminated arch forming the bridge over the Ouse, on the East Anglican railway, by J. S. Valentine. Part 1, 2. *Illus.* 8°. *London*, 1846–48.

——— Civil engineer and contractor's estimate and price book, for home and foreign service, with examples and rules. To which is added the Law of contracts, by W. C. Glen. Part 1. 8°. *London*, [1868?]

——— The practice of engineering field work, applied to land, hydrographic and hydraulic surveying and levelling, for railways, canals, harbours, towns, water supply, ranging curves and centre lines, gauging streams, etc. Including the description and use of surveying and levelling instruments, and the practical application of trigonometrical tables. *Illus.* 8°. *London*, 1858.

Hassall, Arthur Hill. Adulterations detected; or, plain instructions for the discovery of frauds in food and medicine. 2d ed. 8°. *London*, 1861.

Digitized by Google

Hassall, Arthur Hill. Verfälschung der Nahrungsmittel, u. s. w. *See* **Klencke,** H.

Hassell, J. The camera; or the art of drawing in water colours, with instructions for sketching from nature. 8°. *London,* 1823.

Hassenfratz, Jean Henri. La sidérotechnie, ou l'art de traiter les minerais de fer pour en obtenir de la fonte, du fer, ou de l'acier. T. 1–4. 4°. *Paris,* 1812

Hasskarl, Carolo. Conmelinaceae Indicae. Imprimis Archipelagi Indici, adjectis hisce terris alienis. 8°. *Vindobonae,* 1870.

Hassler, F. R. Elements of analytic trigonometry; plane and spherical. 8°. *New York,* 1826.

——— Elements of the geometry of planes and solids. 8°. *Richmond,* 1828.

Hastings, John. Lectures on yellow fever; its causes, pathology, and treatment. roy. 8°. *Philadelphia,* 1848.

——— The practice of surgery, and the application of dressings, etc. 8°. *Philadelphia,* 1850.

Hastings, Thomas. The British archer, or tracts on archery. 4°. *London,* 1831

Haswell, Charles H. Engineers and mechanics' pocket-book, containing United States and foreign weights and measures; tables of areas and circumferences of circles; circular segments and zones of a circle; squares and cubes, square and cube roots; lengths of circular and semi-elliptic arcs; and rules of arithmetic. Mensuration of surfaces and solids; the mechanical powers; geometry, trigonometry, gravity, strength of materials, water-wheels, hydraulics, hydrostatics, pneumatics, statics, dynamics, gunnery, heat, winding engines, tonnage, shot, shells, etc. Steam and the steam-engine; combustion, water, gunpowder, cables and anchors, fuel, air, guns, etc. Tables of the weights of metals, pipes, etc. Miscellaneous notes, dimensions of steamers, mills, motion of bodies in fluids, orthography of technical terms, etc. 17th ed. 12°. *New York,* 1866.

Hatin, Jules. Cours complet d'accouchemens et de maladies des femmes et des enfans. *Illus.* 8°. *Paris,* 1832.

HATS. Art de faire des chapeaux. Par J. A. Nollet. PARIS. **Acad. des sc., arts et métiers, v. 29 and 7.**

HATS. Decision on the application of E. Wells for an extension of patent for forming and hardening hat bodies. *See* **Thomas,** P. F.

——— Hints on. *See* **Melton,** Henry.

——— History of the hat. *See* **Genin,** J. N.

——— Hüte aus Filz, Seide und Stroh. Von Wilhelm Pless. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 5.**

——— Die Hutmacherkunst. *See* **Pilzecker,** C. **39 Neuer Schauplatz der Künste.**

——— Manuel des fabricans de chapeaux. *See* **Cluz** and others. **96 Manuels Roret.**

Hauer, Fr. de, and **Foetterle,** Fr. Coup d'œil géologique sur les mines de la monarchie autrichienne; avec une introduction par Guillaume Hardinger. roy. 8°. *Vienne,* 1855.

Hauer, Julius. Die Fördermaschinen der Bergwerke. Mit einem Atlas. 8°. *Leipzig,* 1871.

——— Die Hüttenwesens-Maschinen. Mit einem Atlas. 8°. *Wien,* 1867.

——— Die Ventilationsmaschinen der Bergwerke. 8°. *Leipzig,* 1870.

Haughton, Samuel. Blowpipe characters of minerals. *See* **Smith,** A.

——— Principles of animal mechanics. 2d ed. 8°. *London,* 1873.

Hauksbee, F. Physico-mechanical experiments on various subjects; containing an account of several surprising phenomena touching light, and electricity producible by the attrition of bodies. sm. 4°. *London,* 1709.

Haumann, A. G., Pocket companion of useful tables and information appertaining to the use of wrought iron, for engineers, architects and builders; compiled and rearranged by. 2d ed. 16°. *Pittsburgh* 1876. [Carnegie bros. & co.'s Proprietors. Union Iron Mills.]

Haumann, Gustav Heinrich. Das Ganze des Seidenbaues. *Illus.* 8°. *Ilmenau,* 1829. **44 Neuer Schauplatz der Künste.**

——— Handbuch der Essig- und Senfbereitung; übersetzt von. *See* **Julia de Fontenelle,** J. S. E. **33 Neuer Schauplatz der Künste.**

——— Handbuch der Oelbereitung; übers. von. *See* **Julia de Fontenelle,** J. S. E. **36 Neuer Schauplatz der Künste.**

Digitized by Google

Haupt, Herman. General theory of bridge construction; containing demonstrations of the principles of the art and their application to practice; furnishing the means of calculating the strains upon the chords, ties, braces, counter-braces, and other parts of a bridge or frame of any description. *Illus.* 8°. *New York,* 1851. [2 copies.]

——— Military bridges: with suggestions of new expedients and constructions for crossing streams and chasms. Including designs for trestle and truss bridges for military railroads. *Illus.* 8°. *New York* 1864.

Hauschild, Max. Die Baumwollen-Spinnerei; Vorwort von. *See* **Niess,** Bruno. **288 Neuer Schauplatz der Künste.**

Hauy, M. L. Traité des caractères physiques des pierres précieuses, pour servir à leur détermination lorsqu'elles ont été taillées. 8°. *Paris,* 1817.

Haven, Joseph. Mental philosophy; including the intellect, sensibilities, and will. 12°. *Boston,* 1857.

Haven, Samuel F. Archæology of the United States; by. **Smiths'n contrib., v. 8.**

HAVENS of safety. By J. Vetch. *See* **Weale's papers on engineering, v. 2.**

Havrez, Jules. Perfectionnements introduits dans l'exploitation de la houille en Angleterre. Rapport sur un voyage entrepris en 1866, sous les auspices du gouvernement belge, et des comités charbonniers de Liége et de Charleroi. 8°. *Paris et Liége,* 1867.

HAWAII. Natural history of the Hawaiian and Fanning islands and Lower California. By T. H. Streets. *See* UNITED STATES. **Interior dept. National museum. Bulletin 7.**

Hawes, Arthur B. Rifle ammunition; notes on the manufactures connected therewith in the royal arsenal, Woolwich. 8°. *London,* 1859.

Hawker, Peter. Instructions to young sportsmen, in all that relates to guns and shooting; to which is added the hunting and shooting of North America, with descriptions of the animals and birds. 1st Amer. ed. *Illus.* 8°. *Philadelphia,* 1846. 2d ed., 1853.

Hawkins, John Isaac. Treatise on the teeth of wheels; ed. by. *See* **Camus,** C. E. L.

Hawks, Francis L. Appletons' cyclopædia of biography; ed. by. *See* **Appleton's** cyclopædia of biography.

Hawney, William. The complete measurer; or, the whole art of measuring. 2 parts. 8th ed. 18°. *Dublin,* 1785.

Haxo d'Épinal. De la fécondation artificielle des œufs de poissons et de leur éclosion, au moyen des procédés découverts par MM. Remy et Géhin; suivi de réflexions sur l'ichthyogénie, par. 8°. *Épinal,* 1853.

——— Die künstliche Fisch-Erzeugung. 2te Aufl. 8°. *Leipzig,* 1855.

Hay, David Ramsay. Die Gesetze der Farbenharmonie. Aus dem Englischen. Mit mehreren Zusätzen von L. Hüttmann. *Illus.* 8°. *Weimar,* 1848. **172 Neuer Schauplatz der Künste.**

Hayden, F. V. Geological survey of the territories. *See* UNITED STATES. **Interior** department.

Haydn, Joseph. A dictionary of dates relating to all ages and nations. 11th ed.; rev. by Benjamin Vincent. 8°. *London,* 1863.

——— Dictionary of popular medicine and hygiene; comprising all possible self-aids in accidents and disease. Ed. by Edwin Lankester. roy. 8°. *London,* 1874.

Hayes, Isaac I. An Arctic boat journey in the autumn of 1854. New ed. *Illus.* 12°. *Boston,* 1867.

——— The open Polar sea; a narrative of a voyage of discovery towards the north pole in the schooner "United States." 8°. *New York,* 1867.

Hayes, John L. Report on wool. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 6.**

Hayes, Samuel S. Commission for revision of the revenue system. 1865–66. *See* UNITED STATES. **Treasury** department.

Hazard, George S. Quality and characteristics of cereal products exhibited. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Hazard, Rowland G. Two letters on causation and freedom in willing; addressed to John Stuart Mill; with an appendix on the existence of matter and our notions of infinite space. 12°. *Boston,* 1869.

Digitized by Google

Hazeltine, Miron J. Brevity and brilliancy in chess; a collection of games at this royal pastime, ingeniously contested, and ending with scientific problems. 12°. *New York*, 1866.

Hazen, Edward. The euphonic spelling book, and reader. Part 1. 24°. *New York*, 1855.

HEAD and neck, Observations on surgical diseases of the. *See* **Observations.**

Heal, John Harris. Illustrated catalogue of bedsteads, and priced list of bedding. 1. 8°. *London*, 1853.

HEALTH and long life, An essay of. *See* **Cheyne,** George.

—— and longevity, The code of. *See* **Sinclair,** *Sir* John.

—— A guide to. *See* **Davis,** James J.

—— Hints on. *See* **Coale,** William Edward.

—— Hygiène publique. Mémoires sur les questions les plus importantes. *See* **Parent-Duchatelet.**

—— The laws of. *See* **Alcott,** William A.

—— lift (The); its theory and practice. *See* **Reily,** Frank W.

—— Philosophy of. *See* **Coles,** L. B.

—— Recueil industriel—salubrité publique. *See* **Moléon,** J. G. V. de.

HEART, Manual of diagnosis of diseases of the. *See* **Andry,** Felix.

HEAT. *See* **Deschanel,** A. Privat. Natural philosophy, v. 2.

—— as a mode of motion. *See* **Tyndall,** J.

—— Determining the heat of certain solids. *See* **Johnson,** W. R. **Scientific essays.**

—— Economy of. *See* **Johnson,** W. R. **Scientific essays.**

—— Elementary treatise on. *See* **Stewart,** Balfour.

—— L'équivalent mécanique de la chaleur. *See* **Hirn,** G. A.

—— Equivalent of heat. By J. R. Mayer. *See* **Grove,** William Robert. Correlation and conservation of forces.

—— Experimental inquiries respecting. *See* **Johnson,** W. R. **Scientific essays.**

—— Grundsätze der Feuerungskunde. *See* **Péclet,** J. C. E. **142 Neuer Schauplatz der Künste.**

—— Laws of. *See* **Reid,** H. **Steam** engine.

—— Laws of radiant and conducted. *See* **Hood,** C.

—— Management of. *See* **Buchanan,** R.

HEAT, The nature and propagation of. *See* **Leslie,** John.

—— The phenomena and laws of. *See* **Cazin,** Achille.

—— A practical treatise on. *See* **Box,** Thomas.

—— Theory of. *See* **Kelland,** Philip.

—— Traité de la chaleur. *See* **Péclet,** J. C. E.

—— Treatise on. *See* **Lardner,** D. **Lardner's cabinet cyclopædia, v. 106.**

—— —— By Ogg. *See* LONDON. **Society of useful knowledge, v. 1.**

—— —— By E. Péclet. *See* **Weale,** J. **Papers on engineering, v. 2, 3.**

—— Wärme in Eisenhohöfen. *See* **Bell,** J. Lowthian.

Heath, L. The infallible government counterfeit detector. 4°. *Boston*, 1877.

Heather, J. F. An elementary treatise on descriptive geometry, with a theory of shadows and of perspective: extracted from the French of G. Monge. To which is added a description of the principles and practice of isometrical projection. 12°. *London*, 1851. **Weale's series, No. 76, 77.**

—— Strength of materials; ed. by. *See* **Barlow,** P.

—— A treatise on mathematical instruments, including most of the instruments employed in drawing, for assisting the vision, in surveying and levelling, in practical astronomy, and for measuring the angles of crystals; in which their construction and the methods of testing, adjusting and using them, are concisely explained. 2d ed. 12°. *London*, 1851. 8th ed., 1866. **Weale's series, No. 32.**

HEATING apparatus. Erfindungen über Feuerungs Anlagen. *See* **Péclet,** J. C. E. **212 Neuer Schauplatz der Künste.**

—— —— Guide pratique du construction d'appareils économiques de chauffage. *See* **Flamm,** Pierre.

—— —— Konstruction von Feuerungs-Anlagen. *See* **Rössler,** H.

—— Art de chauffer par le thermosiphon. *See* **A* * *.**

—— Art du chauffage domestique. *See* **Pelouze, E. Encyclopédie populaire, v. 16.**

—— Bau der Krankenhäuser mit Berücksichtigung der Heizung. *See* **Degen,** L.

Digitized by Google

HEATING. Chauffage et ventilation. *See* **Morin,** Arthur.

——— Chauffage par l'électricité. *See* **Delatot-Sevin.**

——— Heater and filter combined. *See* **Stillwell's** patent.

——— Heitzung mit erwärmter Luft. *See* **Meissner,** P. T.

——— Luftcirculationsheizung. *See* **Bernhardi,** A.

——— Manual of. *See* **Fish,** R.

——— Muster-Sammlung für Ofenbauer. *See* **Dempp,** C. W.

——— Nouveaux documents relatifs au chauffage. *See* **Péclet,** J. C. E.

——— Remarks on. *See* **Burns,** R. S.

HEAVEN and hell. *See* **Swedenborg,** Emanuel.

HEAVENLY bodies, The motions of. *See* **Gumaer,** Peter E.

HEAVENS, The. *See* **Guillemin,** Amédée.

Hebert, Luke. Appendix containing descriptions of boilers, etc. *See* **Galloway,** E. **Steam** engine.

——— The engineer and mechanic's encyclopædia; comprehending practical illustrations of the machinery and processes employed in every description of manufacture of the British empire. 2 v. *Illus.* 8°. *London,* 1849. New ed., 1852.

HEBREW and English lexicon. *See* **Gesenius,** William.

——— grammar. *See* **Gesenius,** William.

——— ——— An elementary. *See* **Green,** William Henry.

Hecht, Abslam. Instructions for weaving in all of its branches. 8°. *Baltimore,* 1849.

Heck, J. G. Iconographic encyclopædia of science, literature, and art. Transl. from the German, by Spencer F. Baird. 4 v., with 2 v. of plates. roy. 8°. *New York,* 1852.

Hedde, Isidore. Chambre de commerce de Saint-Étienne. Description méthodique des produits divers recueillis dans un voyage en Chine. 8°. *Saint-Étienne,* 1848.

Hedge, Egbert. American railroad journal; ed. by. *See* **American.**

Hedinger, A. Der Vogelschutz. Eine Studie. 12°. *Stuttgart,* 1873.

Hedley, Oswald Dodd. Who invented the locomotive engine? With a review of Smiles' Life of Stephenson. 8°. *London,* 1858.

Heeren, Friedrich. Technisches Wörterbuch. *See* **Karmarsch,** K.

Heiden, Jan van der, and Jan van der, *de Jonge.* Beschrijving der nieuwlyks uitgevondenen geoctrojeerde slang-brandspuiten, en haare wyze van brandblussen. Nevens beschrijving der brand-ordres van der stad Amsterdam. fol. *Amsterdam,* 1735. pp. 52.

Heider, Eduard. Der Bau der schiefen Brücke über den Sannfluss bei Steinbruck, etc. 4°. *Gratz,* 1872.

Heider, Eduard J. Der Bau des vereinigten Slip- und Trocken-Dock's im neuen Arsenale des österreichischen Lloyd in Triest. Ein Beitrag über die Verwendung der Santorin-Erde zu Wasserbauten. *Illus.* fol. *Triest,* 1861.

Heidner, G. Die Schule des Uhrmachers. Eine Anleitung zum Selbstunterricht in den theoretischen Grundlehren der Zeitmesskunst, sowie zur richtigen Construktion und Berechnung aller Arten von Uhren. *Illus.* 8°. *Wiesbaden,* 1865.

HEIGHTS and distances, Method of taking. *See* **Drummond,** T.

Heindenfeld, Theodore E. The phonic primer, and first reader. 18°. *New York,* 1866.

Heine, Wilhelm. Reise um die Erde nach Japan an Bord der Expeditions-Escadre unter Commodore M. C. Perry, in 1853–'54–'55. Unternommen im Auftrage der Regierung der Vereinigten Staaten. 2 B. 8°. *Leipzig und New York,* 1856.

Heinlein, Heinrich. Photographikon. Hülfsbuch auf Grund der neuesten Entdeckungen und Erfahrungen in allen Zweigen der photographischen Praxis. Zugleich an Stelle der vierten Auflage von J. Krüger's Vademecum für den praktischen Photographen. 8°. *Leipzig,* 1864.

Heinsius, Johann Wilhelm. Allgemeines Bücher-Lexikon oder vollständiges alphabetisches Verzeichniss aller von 1700 bis zu Ende 1856 erschienenen Bücher, welche in Deutschland und in den durch Sprache und Literatur damit verwandten Ländern gedruckt worden sind. 12 B. [Bound in 17 v.] 4°. *Leipzig,* 1812–58.

Heintl, Franz. Landwirthschaft des österreichischen Kaiserthumes. Theil 1–3. 8°. *Wien,* 1808–12.

Digitized by Google

Heintl, Franz. Ueber die Blattern der Schafe, derselben Behandlung und Impfung. 8°. *Wein*, 1823.

——— Ueber die Mittel durch welche die kohlensaure Luft unschädlich gemacht, auch aus den Kellergang entfernt werden kann. 8°. *Wien*, 1825.

——— Der Weinbau des österreichischen Kaiserthums. 8°. *Wien*, 1821.

Heintz, W. Zeitschrift für die gesammten Naturwissenschaften; redig. v. *See* HALLE.

Heinzerling, F. Die angreifenden und widerstehenden Kräfte der Brücken- und Hochbau-Constructionen. 24°. *Berlin*, 1867.

——— Die Brücken in Eisen; Baumaterial, technische Entwicklung, Konstruktion und statische Berechnung der eisernen Brücken. 8°. *Leipzig*, 1870.

Heiss, Philipp. Die Bierbrauerei, mit besonderer Berücksichtigung der Dickmaischbrauerei. Nebst einem Anhange von. Nach neuesten Fortschritten bearbeitet von V. Griessmayer. 8°. *Augsburg*, 1875.

Helfenstein, James. A comparative grammar of the Teutonic languages, being at the same time a historical grammar of the English language. 8°. *London*, 1870.

HELIOCHROMY. *See* **Hill,** L. L.

HELIOGRAPHY. The camera and the pencil, or the heliographic art. *See* **Root,** M. A.

——— Humphrey's journal of the daguerreotype, and the sciences and arts appertaining to heliography. *See* **Humphrey's** journal.

HELIOTROPE. Beschreibung eines Reichenbachischen Wiederholungs-Kreises, des Heliotropen, etc. *See* **Breithaupt,** F. W.

Heller, *Prof.* Cam. Die Zoophyten und Echinodermen des Adriatischen Meeres. 8°. *Wien*, 1868.

Helmholtz, Hermann Ludwig Ferdinand. Correlation and conservation of forces. By Prof. Grove and others. *See* **Grove,** William Robert.

——— Popular lectures on scientific subjects. Translated by E. Atkinson; with an introduction by Prof. Tyndall. 8°. *New York*, 1873.

Helmuth, Johann Heinrich. Gemeinnützige Naturgeschichte des In- und Auslandes. 4ter. B. Beschreibung der Amphibien. 12°. *Leipzig*, 1808.

Helmuth, Johann Heinrich—Continued.

Helmuth, William Tod. Practice of surgery; its adaptation to the homœopathic practice. 8°. *Philadelphia*, 1855.

Helping hand, for town and country; an American home book of practical and scientific information. *See* **Draper,** Lyman C., and **Croffut,** W. A.

HEMP-SPINNING. Elemente der Maschinen-Hanf-Spinnerei. *See* **Choimet,** N. **128 Neuer Schauplatz der Künste.**

——— ——— Die Spinnerei - Industrie. *See* **Ramming,** Hermann. **281 Neuer Schauplatz der Künste.**

Hempel, Charles J. Organon of specific homœopathy; or, an inductive exposition of the homœopathic healing art. roy. 8°. *Philadelphia*, 1854.

Henckel, C., and **Born,** F. Nautical and commercial pocket-dictionary and dialogue-book for navigators, merchants, and travellers; in eight languages: English, French, Danish, German, Swedish, Dutch, Spanish and Italian. l. 4°. *Copenhagen*, 1855.

Henckel, J. F. Pyritologia; a history of the pyrites, the principal body in the mineral kingdom. Transl. from the German of. 8°. *London*, 1757.

Henderson, Alexander. The history of ancient and modern wines. 4°. *London*, 1824.

Henderson, E. Life of James Ferguson; a brief autobiographical account, and memoir. 8°. *Edinburgh, London, and Glasgow*, 1867.

Henderson, Peter. Practical floriculture; a guide to the successful cultivation of plants. 12°. *New York*, 1869.

Henderson, W. A. The housekeeper's instructor; or, universal family cook; a clear display of cooking in all its branches, to which is added, The complete art of carving. 14th ed. 8°. *London*, 1807.

Henfrey, Arthur. Anatomical manipulation, etc. *See* **Tulk,** Alfred.

——— Journal of the Photographic society; ed. by. *See* LONDON.

——— Micrographic dictionary. *See* **Griffith,** J. W.

Henlé, J. A treatise on general pathology. Transl. from the German, by H. C. Preston. 8°. *Philadelphia*, 1853.

Digitized by Google

Hennah, Thomas H. Photographic manipulation. The collodion process. 2d ed. 12°. *London*, 1854. pp. 48.

Henneberg, W. Jahresbericht über die Untersuchungen und Erfahrungen auf dem Gebiete der landwirthschaftlichen Pflanzenproduction, 1855 und 1856. In Verbindung mit C. Kraut und F. Stohmann. Separat-Abdruck aus dem Journal für Landwirthschaft. 2te Abth. 8°. *Göttingen*, 1859.

Henny, Thomas. Treatise on the cultivation of sugar cane. *See* **Eight** practical treatises.

Henry, Alexander. A glossary of scientific terms. 16°. *London*, 1861.

Henry, Joseph, **Bache,** A. D., and **Peirce,** B. Defence of Dr. Gould by the scientific council of the Dudley observatory. 2d ed. 8°. *Albany*, 1858.

Henry, William Charles. Memoirs of the life and scientific researches of John Dalton. 8°. *London*, 1854. **Cavendish society publications.**

Henslow, John Stevens. The principles of descriptive and physiological botany. 16°. *London*. **Lardner's cabinet cyclopædia, v. 123.**

Henusman, Henry. On civil engineering and machinery. *See* **Lectures** on the results of the exhibition.

Henz. Aufsätze betreffend das Eisenbahnwesen in Nord-America. Nach Reise-Notizen des geheimen Regierungsrath Henz bearbeitet, von A. Bendel. *Illus.* 4°. *Berlin*, 1862.

Henze, Adolph. Handbuch der Schriftgiesserei und verwandten Nebenzweige. *Illus.* 8°. *Weimar*, 1844. **138 Neuer Schauplatz der Künste.**

Heppe, Gustav. Die chemischen Reactionen der wichtigsten anorganischen und organischen Stoffe: Tabellen alphabetischer Anordnung zum Gebrauche bei Arbeiten im Laboratorio. 8°. *Leipzig*. 1875.

HERALDRY, The elements of. *See* **Whitmore,** William H.

—— English. *See* **Boutell,** Charles.

—— A familiar introduction to. *See* **Barrington,** Archibald.

—— Historical and popular. *See* **Boutell,** Charles.

Herapath, John. The railway magazine and annals of science; ed. by. *See* **Railway** magazine.

HERBAL, A new family. *See* **Thornton,** Robert John.

—— The universal. *See* **Green,** Thomas.

HERBALL, The. *See* **Gerarde,** John.

—— of large extent, An. *See* **Parkinson,** John.

Herbelot, P. d'. Étude des armes; trad. par. *See* **Xylander,** J.

Herbert, Henry William. [*Frank Forrester.*] The complete manual for young sportsmen. 12°. *New York*, 1857.

—— Frank Forester's fish and fishing of the United States and British provinces of North America. 3d ed., with supplement. 12°. *New York*, 1851.

—— Frank Forester's horse and horsemanship of the United States and British provinces of North America. 2 v. *Illus.* 8°. *New York*, 1857.

Herdman, William Garvin. A treatise on the curvilinear perspective of nature, and its applicability to art. 8°. *London*, 1853.

Héricart de Thury, Louis Étienne François. Exposition des produits de l'industrie française en 1834. Extrait du rapport, sur les instrumens aratoires et d'économie rurale ou domestique. 8°. *Paris*, 1834. pp. 48.

—— Rapport sur la description des instrumens aratoires de Thaer. Traduit de l'allemand par Mathieu de Dombasle. 4°. [*Paris*, 1821.] pp. 10.

Hermann, K. R. Lehre von den mineralischen Düngmitteln, gestützt auf Agrikultur und Chemie. *See* **Vermischte** Schriften.

Hermann, Friedrich Benedikt Wilhelm von. Bericht der Beurtheilungs-Commission bei der Industrie-Ausstellung zu München, 1854. *See* MUNICH.

—— Ueber die Gliederung der Bevölkerung des Königreichs Bayern. Festrede vorgetragen in der königlichen Akademie der Wissenschaften zu München. 4°. *München*, 1855. pp. 29.

Hermbstädt, Sigismund Friedrich. Bulletin des Neuesten und Wissenswürdigsten aus der Naturwissenschaft so wie den Künsten, Manufakturen, technischen Gewerben, der Landwirthschaft und der bürgerlichen Haushaltung. B. 1–15. 8°. *Berlin*, 1809–13.

—— Museum des Neuesten und Wissenswürdigsten aus dem Gebiete der Naturwissenschaft, der Künste, der Fabriken,

Digitized by Google

Hermbstädt, S. F.—Continued.
der Manufakturen, etc. B. 1-15. 8°. *Berlin*, 1814-18.

HERNE bay pier, Restoration of. By W. M. Higgins. **Weale's papers on engineering, v. 2.**

HERNIA, Construction of instruments and their mode of action in the radical cure of. *See* **Chase,** Heber.

Hero of Alexandria, The pneumatics of, from the original Greek. Transl. by J. G. Greenwood for, and ed. by, Bennet Woodcroft. sm. 4°. *London*, 1851.

——— Works of. *See* **Veterum** mathematicorum.

HERPETOLOGY and ichthyology, Elements of. *See* **Ruschenberger,** W. S. W.

Herpin, Jean Charles. Rapport sur les appareils et les procédés de blanchissage du linge. *See* **Rouget de Lisle.**

Herring, Richard. Paper and papermaking, ancient and modern. With an introduction, by George Croly. 8°. *London*, 1855.

Herron, James. A practical description of Herron's patent trellis railway structure, the patent wrought-iron railing chairs, new and improved mode of joining the ends of railway bars, scarfing timbers, and improved fastenings, with a compendium of the process of kyanizing; i. e. for preserving the timber from decay: and the discoveries of M. Boucherie, by means of the pyrolignite of iron. 4°. *Philadelphia*, 1841.

Herschel, *Sir* John F. W. Familiar lectures on scientific subjects. 16°. *London and New York*, 1866.

——— A manual of scientific enquiry; originally edited by Sir John F. W. Herschel. 3d ed., superintended by Robert Main. I. Division. 1. Astronomy, by G. B. Airy. 2. Hydrography, by F. W. Beecher, rev. by Washington. 3. Tides, by W. Whewell. II. Division. 1. Terrestrial magnetism, by E. Sabine, assisted by Welsh. 2. Meteorology, by Sir J. F. W. Herschel. 3. Atmospheric waves, by W. R. Birt. III. Division. 1. Geography, by W. J. Hamilton. 2. Statistics, by G. R. Porter, rev. by W. Newmarch. 3. Medical statistics, by A. Bryson. 4. Ethnology, by J. C. Pritchard, rev. by T. Wright. IV. Division. 1. Geology, by C. Darwin. 2 Mineralogy; by Sir H. de la Beche, rev. by W. H. Miller. 3. Earthquake phenomena,

Herschel, *Sir* John F. W.—Continued.
by R. Mallet. 4. Zoology, by R. Owen. 5. Botany, by Sir W. Hooker. 8°. *London*, 1859. [2 copies.]

——— Meteorology. From the Encyclopædia Britannica. 16°. *Edinburgh*, 1861.

——— Outlines of astronomy. 5th ed. 8°. *London*, 1858.

——— Physical geography. From the Encyclopædia Britannica. 8°. *Edinburgh*, 1861.

——— A preliminary discourse on the study of natural philosophy. New ed. 16°. *London*, 1851. **Lardner's cabinet cyclopædia, v. 98.**

——— A treatise on astronomy. New ed. 18°. *London*, 1851.

Herschel, William. Biography of. *See* **Arago,** D. F. J. **Biography** of scientific men.

Hertel, A. W. Construction der Viaducte, etc.; übers. von. *See* **Fontenay,** T.

——— Englisches Receptbuch; nach dem Englischen, von. *See* **Reinnel,** F. **31 Neuer Schauplatz der Künste.**

——— Erhaltung und Restauration der Gemälde; übers. v. *See* **Déon,** H. **203 Neuer Schauplatz der Künste.**

——— Kleine Akademie der zeichnenden Künste und der Malerei. *Illus.* 8°. *Weimar*, 1841. **134 Neuer Schauplatz der Künste.**

——— Kunst des Staffirmalers u. s. w.; übers. v. *See* **Watin,** M. **207 Neuer Schauplatz der Künste.**

——— Die moderne Bautischlerei. Nach den neuesten französischen und deutschen Werken und eignen Erfahrungen bearbeitet. Mit Atlas. 8°. *Weimar*, 1847. **148 Neuer Schauplatz der Künste.**

——— Die Oelmalerei in umfassender technischer Beziehung. Nach Lasalle und Thenot und mit Benutzung älterer und neuerer Schriften und eigener Erfahrung frei bearbeitet. 8°. *Weimar*, 1857. **235 Neuer Schauplatz der Künste.**

——— Perspective, oder die Lehre von den Projectionen, allgemein fasslich und praktisch bearbeitet. *Illus.* 8°. *Weimar*, 1851. **184 Neuer Schauplatz der Künste.**

Herts. Gehülfe für Haus- und Stubenmaler. *See* **Barber,** E. **204 Neuer Schauplatz der Künste.**

Herzberg, Carl. Vollständiges Handbuch der chemischen Fabrikenkunde. *Illus.* 8°. *Weimar*, 1851. **185 Neuer Schauplatz der Künste.**

Digitized by Google

Herzberg, Rudolph. Die Nähmaschine. Ihr Bau und ihre Benutzung. *Illus.* 8°. *Berlin*, 1863.

HESSE CASSEL. Landwirthschaftlicher Anzeiger für Kurhessen. Jahrg. 7-13, 1861-67. 6 B. 8° *Kassel*, 1861-67.

HESSE DARMSTADT. Der Gewerbverein für das Grossherzogthum Hessen. Vorlegeblätter für Handwerkzeichenschulen und zum Privatgebrauch. Auf Veranlassung des Vereins hrsg. von Hektor Rössler. 1. Abth. Die geometrischen Constructionen. 2. Abth. Die darstellende Geometrie. 3. Abth. Die Lehre von dem Steinschnitt. 4. Abth. Holzverbindungen. 5. Abth. Feuerungsanlagen. 6. Abth. Die Arbeiten des Schlossers. 7. Abth. Die Arbeiten des Bautischlers. 4°. *Darmstadt*, 1844-46. [Supplementary to this is Holzverbindungen für Tischlerarbeiten, hrsg. v. F. Fink. 4°. *Darmstadt*, 1844-56.]

——— Die grossherzogliche Centralstelle für die Landes-Statistik. Beiträge zur Statistik des Grossherzogthums Hessen. Hrsg. von der Centralstelle. B. 1-13. 4°. *Darmstadt*, 1862-72.

——— Der grossherzogliche Gewerbverein. Sammlung von Musterzeichnungen für Techniker und die verschiedenen Zweige des Gewerbebetriebs. Hrsg. von dem Gewerbverein. Enthaltend: Oelmühlen, Wasserräder und Göpel, Ornamente, Werkzeuge für Metall und Holzarbeiten, Spenglerwerkzeuge, Pressen, Grabsteine, Dachdeckerwerkzeuge, Buchbinderwerkzeuge, Wagnerwerkzeuge, Wagner- und Schmiedearbeiten, Gesimse, Möbel, Mühlen, Baupläne. *Illus.* 2 Bde. 8°; plates, fol. *Darmstadt*, 1843.

——— Der Landesgewerbverein. Gewerbeblatt für das Groszherzogthum Hessen. Zeitschrift des Landesgewerbvereins. Jahrg. 12-35, 1849-72. [Jahrg. 1863-68 and 1871 missing.] 8°. *Darmstadt*, 1849-72.

——— Die landwirthschaftlichen Vereine des Grossherzogthums Hessens. Zeitschrift. Von C. Zeller. Jahrg. 25-44, 1857-74. 4°. *Darmstadt*, 1857-74.

Hessler, J. F. Encyclopädische Zeitschrift des Gewerbewesens; red. von. *See* **Encyclopädische.**

——— and **Pisko,** F. Joseph. Lehrbuch der technischen Physik. Dritte, dem neuesten Stande der Wissenschaft entsprechende, Auflage. 2 Bde. 8°. *Wien*, 1866.

Heuschling, Xavier. Bulletin de la commission centrale de statistique de Belgique. (Extrait du tome 1.) Des naissances dans la ville de Bruxelles, considérées dans leur rapport avec la population. 4°. pp. 41. *n. t. p.*

——— ——— ——— Sur l'accroissement de la population de la Belgique, pendant la période décennale de 1831 à 1840. 4°. pp. 20. *n. t. p.*

——— ——— (Extrait du tome 2.) Sur le mouvement de l'état civil en Belgique, pendant les quatre années 1841 à 1844, 4°. pp. 16. *n. t. p.*

——— Extrait du journal des économistes; édition belge. De la réforme des impôts en Belgique comme moyen de soulager le paupérisme et d'en arrêter les progrès. 8°. pp. 8. *n. t. p.*

——— De l'impôt sur le revenu. Nouvelles considérations. 8°. *Bruxelles*, 1848. pp. 37.

——— Des impôts dans leur rapport avec l'agriculture. 8°. *Bruxelles*, 1849. pp. 6.

Heusinger von Waldegg, Edmund. Die eiserne Eisenbahn oder neue einfache Eisen-Constructionen für Eisenbahnen. *Illus.* fol. *Hannover*, 1863.

——— Handbuch für specielle Eisenbahn-Technik. B. 1-4. 2te Aufl. 8°. *Leipzig*, 1873-75.

——— Die neuesten Oberbau-Constructionen der dem Vereine deutscher Eisenbahnverwaltungen angehörenden Eisenbahnen. *Illus.* 3 B. 4°. *Wiesbaden*, 1868-71.

——— Organ für die Fortschritte des Eisenbahnwesens; hrsg. v. *See* **Organ.**

——— Die Schmiervorrichtungen und Schmiermittel der Eisenbahnwagen. Geschichtlich-statistisch-kritische Darstellung. *Illus.* 4°. *Wiesbaden*, 1864.

——— Skizzen und Hauptdimensionen der Locomotiven—nach verschiedenen Systemen—welche in den letzten fünf Jahren von den deutschen Vereinsbahnen beschafft worden sind. 4°. *Wiesbaden*, 1870.

——— and **Clauss,** Wilhelm. Abbildung und Beschreibung der Locomotiv-Maschine nach den besten und neuesten Constructionen. *Illus.* 4°. *Wiesbaden*, 1858.

Heuzé, Gustave. Les plantes industrielles. 1e-2e partie. *Illus.* 8°. *Paris*, 1859-60.

Digitized by Google

Hewitt, Abram S. Report on the production of iron and steel. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 2.**

Hewitt, Robert, *jr.* Coffee; its history, cultivation, and uses; and a map of the world, showing the places where coffee is produced and used. *Illus.* 8°. *New York,* 1872.

Hewson, M. Butt. American railroad journal; ed. by. *See* **American railroad journal.**

Hexamer, Adolph C. Die Kinder-Cholera, oder Summer Complaint, in den Vereinigten Staaten. 12°. *New York,* 1858.

HEXAMERON Ambrosii. *See* **Ambrose,** *Saint.*

Heyder, Fr. Das Ganze der Kleidermacherkunst. 2te Aufl. *Illus.* 8°. *Weimar,* 1837. **9 Neuer Schauplatz der Künste.**

Heydt, E. Canons rayés; trad. par. *See* **Schmoelzl,** J.

Hibberd, James Shirley. Art of making paper flowers; introduction by. *See* **Bartlett,** *Mrs.*

——— The book of the aquarium; or, practical instructions on the formation, stocking and management in all seasons, of collections of marine and river animals and plants. New ed. 16°. *London,* 1869.

——— Garden favorites; their history, properties, cultivation, propagation and general management in all seasons; with lists of choice varieties. 12°. *London,* 1858.

Hickcox, John H. A historical account of American coinage. *Illus.* sm. 4°. *Albany, N. Y.,* 1858.

Hickok, Laurens P. Rational cosmology or the eternal principles and the necessary laws of the universe. 8°. *New York,* 1858.

——— Rational psychology; or, the subjective idea and the objective law of all intelligence. roy. 8°. *Auburn,* 1849.

——— A system of moral science. 8°. *Schenectady,* 1853.

Hickok, W. O., and son. Illustrated catalogue of ruling machines, etc. 8°. *New York,* 1869.

Hicks, J. Braxton. The earthworm and the common housefly. *See* **Samuelson,** James.

——— The honey-bee. *See* **Samuelson,** J.

HIDATSA Indians, Ethnography and philology of. By W. Matthews. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. Misc. pubs., No. 7.**

HIDES, skins, and leather. **Abridgments English Patents, No. 55.**

Higgins, Bry. Experiments and observations made with the view of improving the art of composing and applying calcareous cements, and preparing quicklime. 8°. *London,* 1780.

Higgins, Clement. A digest of the report d cases relating to the law and practice of letters patent for inventions decided from the passing of the statute of monopolies to the present time. 8°. *London,* 1875. [2 copies.]

Higgins, W. Mullingar. The handbook of natural philosophy. 24°. *London,* 1838.

——— Harbors on the southeastern coast. **Weale's papers on engineering, v. 2.**

——— The house painter; or decorator's companion: a treatise on the origin of colors; the laws of harmonious coloring, the manufacture of pigments, oils and varnishes; the art of house painting, graining and marbling. To which is added, a history of the art in all ages. 4°. *London,* 1841.

——— Restoration of Herne bay pier. **Weale's papers on engineering, v. 2.**

Higginson, Francis. The ocean; its unfathomable depths and natural phenomena; comprising authentic narratives and strange reminiscences of enterprise, delusion and delinquency: with the voyage and discoveries of the ship Cyclops. 8°. *London,* 1857.

Highton, Edward. The electric telegraph; its history and progress. *Illus.* 12°. *London,* 1852. **Weale's series, No. 11.**

Hill, B. L., and **Hunt,** James G. The homeopathic practice of surgery; together with operative surgery. roy. 8°. *Cleveland, O.,* 1855.

Hill, John. The construction of timber, from its early growth; explained by the microscope, and proved from experiments. *Illus.* 2d ed. fol. *London,* 1774.

Hill, Laurence. Account of the Hutcheson bridge, Glasgow. *See* **Weale,** J. **Theory** of bridges, v. 1.

Hill, Levi L. A treatise on the daguerreotype; the art made easy; and recent im-

Digitized by Google

Hill, Levi L.—Continued.
provements revealed. 18°. *Lexington, N. Y.*, 1850.

——— A treatise on heliochromy; the production of pictures by means of light, in natural colors. 8°. *New York*, 1856.

Hill, Sumner, and **Brown,** O. B. The tuner's manual; instructions for tuning the piano-forte, organ, melodeon, etc. 24°. *Boston*, 1859.

Hill, T. Puzzles to teach geometry, in seventeen cards. *Boston*, 1848.

Hill, Walter N. Liquid carbonic acid. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— Notes on explosions; their application in torpedo warfare. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Hills, Chester. The builder's guide. A practical treatise on Grecian and Roman architecture, with specimens of the Gothic style. Also, treatises on geometry, decimal fractions, mensuration, trigonometry, and carpentry and joinery. Rev., with additions of villa and schoolhouse architecture, by H. Austin and Henry Barnard. *Illus.* fol. *Hartford*, 1846.

Hilpert, Joseph Leonhard. English-deutsches und deutsch-englisches Wörterbuch. Mit einer Vorrede von E. Karcher. 2. B. 4°. *Karlsruhe*, 1846.

——— Hilpert's English-German and German-English dictionary; compiled from the large 4° ed. Complete in 1 v. 8°. *London*, 1854. [2 pagings.]

HIMALAYAN journals; notes of a naturalist in Bengal, etc. *See* **Hooker,** Joseph Dalton.

Himes, Charles F. Leaf prints; or glimpses at photography. 8°. *Philadelphia*, 1868. pp. 38.

Hind, Henry Youle. Explorations in the interior of the Labrador peninsula, the country of the Montagnais and Nasquapee Indians. 8°. *London*, 1863.

——— Narrative of the Canadian Red river exploring expedition, 1857, and of the Assiniboine and Saskatchawan exploring expedition of 1858. 2 v. 8°. *London*, 1860.

Hindmarch, W. M. Observations on the defects of the patent laws of this country; with suggestions for the reform of them. 8°. *London*, 1851.

Hindmarch, W. M. A treatise on the law relating to patent privileges for the sole use of inventors, and the practice of obtaining letters patents for inventions, with an appendix of statutes, rules, forms, etc. 8°. *London*, 1846.

HINGES, hinge joints, and door springs. **Abridgments English Patents, No. 59.**

Hinkley, Edward. New methods for multiplication and division, by means of a table of nine hundred and ninety-nine multiples of nine digits. roy. 8°. *Baltimore*, 1853.

——— Tables of the prime numbers and prime factors of the composite numbers; from 1 to 100,000; with methods of construction and examples of use. 8°. *Baltimore*, 1853.

Hinrichs, Johann Conrad. Fünfjähriger Bücher-Catalog. B. 3, 1861–65; B. 4, 1866–70; B. 5, 1871–75. 8°. *Leipzig*, 1861–75——.

——— Verzeichniss der Bücher, Landkarten etc. welche neu erschienen oder neu aufgelegt worden sind, mit Angabe der Seitenzahl, der Verleger, der Preise im 14. Thaler-Fuss, literarischen Nachweisungen und einer wissenschaftlichen Uebersicht. 60 Bde. [Half-yearly; 2 v. bound in 1.] 1847–76. 8°. *Leipzig*, 1847–76——.

Hinton, Henry L. Select historical costumes. 8°. *New York*, 1868.

Hinton John Howard. The history and topography of the United States of North America. Additions, by Samuel L. Knapp; and a continuation to the present time by John O. Choules. 2d ed. *Illus.* 2 v. 4°. *Boston*, 1846.

Hinton, Louis J. Report on the working of stone, and on artificial stones. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 4.**

HINTS on household taste. *See* **Eastlake,** Charles L.

——— to persons about building in the country. *See* **Downing,** A. J.

Hiort, John William. A practical treatise on the construction of chimneys; an examination of the common mode in which they are built, with description of the newly invented tunnel. 8°. *London*, 1826.

HIPPIATRIA; the surgery and medicine of horses. *See* **Clark,** Bracy.

Digitized by Google

HIPPIATRIA; sive marescalia. *See* **Rusius**, Laurentius.

Hipsley, W. Equational arithmetic, applied to questions of interest, annuities, life assurance, and general commerce. 12°. *London*, 1852. **Weale's series, No. 85.**

Hirn, Gustave Adolphe. Recherches sur l'équivalent mécanique de la chaleur. 8°. *Colmar*, 1858.

Hirsch, B. Die Fabrikation der künstlichen Mineralwässer, und anderer mousirender Getränke. 4°. *Braunschweig*, 1871.

Hirsch, J. Max, and **Goldschmidt**, S. Kürschnerwaaren. Leder. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 6.**

Hirzel, H., and **Gretschel**, H. Jahrbuch der Erfindungen und Fortschritte auf den Gebieten der Physik und Chemie, der Technologie und Mechanik, der Astronomie und Meteorologie. Jahrg. 1-12. *Leipzig*, 1865-75——.

HISTOLOGY, Atlas of pathological. *See* **Gluge**, Gottlieb.

—— Human histology, in its relations to descriptive anatomy. *See* **Peaslee**, E. R.

—— Improved methods of photographing histological preparations. *See* UNITED STATES. **War department.**

Historical magazine; and notes and queries concerning the antiquities, history and biography of America. v. 1-10, 1857-66; 2d series, v. 1-8, 1867-70; 3d series, v. 1-2, 1872-73. sm. 4°. v. 1, *Boston and London*. v. 2-10, *New York*. 2d and 3d series, *Morrisania, N. Y.*, 1857-73.

—— sketch of the invention of vertical, tubular boilers. 8°. 1863. pp. 28.

HISTORY, Ancient. Dictionary of Greek and Roman antiquities. *See* **Smith**, William.

—— British, chronologically arranged. *See* **Wade**, John.

—— Chronology of. *See* **Nicolas**, *Sir* N. H. **Lardner's cabinet cyclopædia, v. 2.**

—— Documentary, of the state of New York. *See* NEW YORK.

—— Histoire de cent ans de 1750-1850. *See* **Cantu**, César.

—— An historical atlas. *See* **Worcester**, J. E.

—— Method of teaching and studying the belles-lettres, history, etc. *See* **Rollin**, Charles.

—— Mexican history and archæology. By B. Mayer. **Smiths'n contrib., v. 9.**

—— of Denmark, Sweden and Norway. By S. A. Dunham. **Lardner's cabinet cyclopædia, v. 57-59.**

—— of England. By Sir J. Mackintosh, W. Wallace and R. Bell. **Lardner's cabinet cyclopædia, v. 3-12.**

—— of Europe during the middle ages. By S. A. Dunham. **Lardner's cabinet cyclopædia, v. 48-51.**

—— of France. By E. E. Crowe. **Lardner's cabinet cyclopædia, v. 19-21.**

—— of Greece. By C. Thirlwall. **Lardner's cabinet cyclopædia, v. 33-40.**

—— of Ireland. By T. Moore. **Lardner's cabinet cyclopædia, v. 15-18.**

—— of maritime and inland discovery. By W. D. Cooley. **Lardner's cabinet cyclopædia, v. 60-62.**

—— of natural philosophy. By Powell. **Lardner's cabinet cyclopædia, v. 99. [?]**

—— of Poland. By S. A. Dunham. **Lardner's cabinet cyclopædia, v. 56.**

—— of Rome. **Lardner's cabinet cyclopædia, v. 41, 42.**

—— of Russia. By R. Bell. **Lardner's cabinet cyclopædia, v. 52-54.**

—— of Scotland, By Sir W. Scott. **Lardner's cabinet cyclopædia, v. 13, 14.**

—— of silk, cotton, linen, wool, and other fibrous substances; observations on spinning, dyeing and weaving; an account of the pastoral life of the ancients, their social state and attainments in the arts; with an appendix on Pliny's natural history, on the origin and manufacture of linen and cotton paper, on felting, netting, etc. *Illus.* 8°. *New York*, 1845.

—— of Spain and Portugal. By S. A. Dunham. **Lardner's cabinet cyclopædia, v. 23-27.**

—— of Switzerland. **Lardner's cabinet cyclopædia, v. 22.**

—— of the fall of the Roman empire. By J. C. L. Simonde de Sismondi. **Lardner's cabinet cyclopædia, v. 43, 44.**

—— of the German empire. By S. A. Dunham. **Lardner's cabinet cyclopædia, v. 28-30.**

—— of the intellectual development of Europe. *See* **Draper**, John William.

Digitized by Google

HISTORY of the Italian republics. By J. C. L. Simonde de Sismondi. **Lardner's cabinet cyclopædia, v. 47.**

——— of the Netherlands. By T. C. Grattan. **Lardner's cabinet cyclopædia, v. 55.**

——— of the reformation. By H. Stebbing. **Lardner's cabinet cyclopædia, v. 65, 66.**

——— of the steam engine from the second century before the Christian era. New ed. *Illus.* 12°. *London, n. d.*

——— of the United States. By H. Fergus. **Lardner's cabinet cyclopædia, v. 31, 32.**

——— of Tyrol. Zeitschrift des Ferdinandeums. *See* TYROL.

——— of wonderful inventions. 12°. *New York*, 1849.

——— Outlines of. *See* **Keightley**, T. **Lardner's cabinet cyclopædia, v. 1.**

——— Unterricht in der Geschichte. Von Emm. Hannak. *See* VIENNA. **Gen.-Dir. der Weltaussst. 1873. Bericht. Gruppe 26.**

Hitchcock, Edward. Illustrations of surface geology. **Smiths'n contrib., v. 9.**

Hitchcock, J. J. The farmer and gardener; ed. by. *See* **Farmer.**

Hitt, J. D. Electro-dynamics, or electricity the universal cause of motion in matter: illustrative of the diagnosis and treatment of all diseases, the motions of the planetary system, the laws of gravity, polarization of the needle, climate, and physiology. 18°. *Philadelphia*, 1848.

HIVE and the honey bee, The. *See* **Langstroth**, L. L.

Hlubek, Franz Xavier Wilhelm. Beleuchtung der organischen Chemie des Dr. J. von Liebig in ihrer Anwendung auf Agricultur und Physiologie. 8°. *Gratz*, 1842. pp. 72.

——— Die Ernährung der Pflanzen, und die Statik des Landbaues. 8°. *Prag*, 1841.

——— Die Landwirthschaftslehre in ihrem ganzen Umfange. 2 Bde. 8°. *Wien*, 1846.

——— Ein treues Bild des Herzogthumes Steiermark etc. 4°. *Gratz*, 1860.

Hoare, Charles. The slide-rule, and how to use it: containing instructions to perform all business calculations with rapidity and accuracy. [With a slide-rule in tuck of cover.] 12°. *London*, 186[illegible]. **Weale's series, No. 158.**

HOBART TOWN. Royal society of Tasmania. Report. v. 1-27, 1849-77. 8°. *Hobart Town*, 1849-77 ——.

——— Royal society of Van Diemen's Land. Papers and proceedings. 2 v. 8°. *Hobart Town*, 1849-54.

Hoblyn, Richard D. A manual of the steam engine. *Illus.* 16°. *London*, 1842.

Höck, J. D. A. Ausführliche Beschreibung der bei den Nadler-Drahtzieher-, Kartätschenmacher, Roth- und Gelbgiessergewerken vorkommenden Arbeiten, der dazu erforderlichen Materialien, Maschinen und Werkzeuge. *Illus.* 8°. *Ilmenau*, 1827. **31 Neuer Schauplatz der Künste.**

Hockin, J. B. Practical hints on photography; its chemistry and its manipulations. 8°. *London*, 1860.

Hodge, James T. American railroad journal; ed. by. *See* **American railroad journal.**

Hodge, Paul R. The steam engine, its origin and gradual improvement, from the time of Hero to the present day. *Illus.* 1 v. of plates. 8°. *New York*, 1840.

Hodges, James. Construction of the Victoria bridge in Canada. 2 v. Text, 4°; pl., fol. *London*, 1860.

Hodges, Richard M. Practical dissections. 8°. *Cambridge*, 1858.

——— Same. 2d ed. *Philadelphia*, 1867.

Hodgkinson, Eaton. Experimental researches on the strength, and other properties, of cast iron. *Illus.* 8°. *London*, 1846. [2d part, to 4th ed., of Tredgold, On the strength of metals.]

Hoe, R., and co. Catalogues of printing machines, type revolving single and double cylinder, and Adams' printing presses, cast steel saws, etc. 1st and 2 1 ed. 4°. *New York*, 1871-73.

Hoefer, Hanns. Die Mineralien Kärntens. 8°. *Klagenfurt*, 1870.

Hoefer, Jean Christian Ferdinand. Nouvelle biographie générale, depuis les temps les plus reculés jusqu'à nos jours; publiée par Firmin Didot, frères, sur la direction de. T. 1-46. 8°. *Paris*, 1854-66.

——— Traité de chimie; trad. par. *See* **Berzelius**, J. J.

Hoelder, Georg. Die Fortschritte in der Konstruktion der Pumpen, Saugapparate, Wasserhebungs-, Wasserhaltungs- und Wassersäulen-Maschinen, Dampf-

Digitized by Google

Hoelder, Georg—Continued.
und Handfeuerspritzen, Brunnen-Anlagen, Wasserleitungen, etc., während der neuesten Zeit. *Illus.* sm. 8°. *Weimar,* 1867. **280 Neuer Schauplatz der Künste.**

Hoffman, J. Mémoire sur la porcelaine du Japon. *See* **Julien,** M. Stanislas.

Hoffmann, Frederick. Manual of chemical analysis, as applied to the examination of medicinal chemicals; a guide for the determination of their identity and quality. 8°. *New York,* 1873.

Hoffmann, Philipp. Muster-Sammlung für Maurer. 4°. *München,* 1847.

Hoffmann, Robert. Jahresbericht über die Fortschritte der Agriculturchemie mit besonderer Berücksichtigung der Pflanzenchemie und Pflanzenphysiologie. Jahrg. 1-19, 1856-76. 8°. *Berlin,* 1858-76——.

Hofmann, A. W. Annual report of the progress of chemistry; ed. by. *See* **Liebig,** J. v., and **Kopp,** H.

——— Introduction to modern chemistry, experimental and theoretic. 12°. *London,* 1865.

HOG, The. *See* **Youatt,** William, and **Martin,** W. C. L.

——— The; its origin and varieties. By H. D. Richardson. *See* **Saxton's rural hand books, v. 2.**

Hogard, M. M., and **Hogard,** Henri. Manuel supplémentaire d'arpentage. *Illus.* T. 1-2. 18°. *Paris,* 1836. **42 Manuels Roret.**

Hogarth's analysis of beauty. *See* **Science,** Miscellaneous.

Hogg, Jabez. Elements of experimental and natural philosophy; an introduction to the study of the physical sciences, embracing animal mechanics, pneumatics, hydrostatics, hydraulics, acoustics, optics, caloric, electricity, voltaism, and magnetism. *Illus.* 8°. *London,* 1861.

——— The microscope; its history, construction and application; an introduction to the use of the instrument, and the study of microscopical science. 6th ed. 12°. *London,* 1867.

——— The ophthalmoscope; its mode of application explained and its value shown, in the exploration of internal diseases affecting the eye. 2d ed. 12°. *London,* 1859.

Hogg, Joseph. The merchants and iron trades' guide, engineers and mechanics' companion. 3d ed. 16°. *Newcastle-upon-Tyne,* 1858.

Hohenbruck, R. A. v., and **Oberleithner,** Carl. Flachs-Interessenten, Flachs- und Hanfindustrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

HOHENHEIM. Württembergisches Land- und forstwirthschaftliches Institut. Preis-Verzeichniss der Werkzeuge und Modelle aus der Ackergeräthe-Fabrik. *Illus.* 4°. *Stuttgart,* 1863. pp. 45.

Höhne, F., and **Rösling,** C. W. Das Kupferschmiedhandwerk, mit den nöthigen Vorlehren über die Erzeugung und Behandlung des Rohkupfers, so wie aller in dieses Fach einschlagenden Produkte. *Illus.* 8°. *Weimar,* 1839. **101 Neuer Schauplatz der Künste.**

HOISTING machines. Construction of machinery for hoisting. *See* **Glynn, J. Weale's series, v. 33.**

——— ——— Winding apparatus; including mining hoists. *See* **Robertson,** J.

Holbrook, John Edwards. Ichthyology of South Carolina. 4°. *Charleston, S. C.,* 1860.

Holbrook, Josiah. First lessons in geometry. 24°. *New York,* 1850.

Holcombe, William H. What is homœopathy? a new exposition of a great truth. 8°. *Chicago,* 1865. pp. 24.

Hölder, C. G., and others. Dictionnaire des langues française et allemande. *See* **Mozin,** D. J.

Holdsworth, Edmund W. H. Deep sea fishing and fishing boats; an account of the practical working of the various fisheries around the British islands; boats, nets and other gear in use. 8°. *London,* 1874.

——— and **Young,** Archibald. Sea fisheries, by E. W. H. Holdsworth. Salmon fisheries, by Archibald Young. 16°. *London,* 1877.

Hole, Charles. A brief biographical dictionary, with additions and corrections, by William A. Wheeler. 18°. *New York,* 1866.

Holland, John. A treatise on the progressive improvement and present state of the manufactures in metal. v. 1, 2. Iron and steel; v. 3. Tin, lead, copper, etc.

Digitized by Google

Holland, John—Continued.
3 v. 16°. *London*, 1831–34. **Lardner's cabinet cyclopæd'a, v. 129–131.**

Holland, William M. The life and political opinions of Martin Van Buren. 12°. *Hartford*, 1835.

Holland brick and tiles. Art de fabriquer la brique et la tuile en Hollande. Par G. Jars. Paris. **Acad. roy. des sc., arts et métiers, v. 14.**

——— Dairy husbandry of. *See* **Flint,** C. L. Milch cows and dairy farming.

——— Dairy system pursued by the Dutch. *See* **Harley,** W.

——— Engineering of Holland. By H. Clarke. **Weale's papers on engineering, v. 2.**

——— Handelingen der Nederlandsche entomologische vereeniging. 1 Deel. 1ste, 2de, 4te Stuk. 4°. *Te Leiden*, 1854–57.

——— History of the Netherlands. *See* **Grattan,** T. C. **Lardner's cabinet cyclopædia, v. 55.**

——— Holländische Rindviehzucht und Milchwirthschaft. *See* **Ellerbrock,** Ignatius J.

——— Manufacture of bricks and tiles in Holland. By H. Clarke. **Weale's papers on engineering, v. 3.**

——— Verhandelingen uitgegeven door de commissie belast met het vervaardigen eener geologische beschrijving en kaart van Nederland. Deel 1–2. fol. *Te Haarlem*, 1853–54.

Holley, Alexander L. American and European railway practice in the economical generation of steam and in permanent way. *Illus.* 8°. *New York*, 1861.

——— The permanent way and coal-burning locomotive boilers of European railways; with a comparison of the working economy of European and American lines. *See* **Colburn,** Zerah.

——— A treatise on ordnance and armor; descriptions, discussions and professional opinions concerning the material, fabrication, requirements, capabilities and endurance of European and American guns for naval, sea-coast, and iron-clad warfare, and their rifling, projectiles, and breech-loading: also, results of experiments against armor, from official records. With an appendix, referring to gun-cotten, hooped guns, etc. *Illus.* 8°. *New York*, 1865.

Holly, Henry Hudson. Country seats containing lithographic designs for cottages, villas, mansions, etc., with their accompanying outbuildings: also, country churches, city buildings, railway stations, etc. sm. 4°. *New York*, 1863.

Holly, H. W. The art of saw-filing. *Illus.* 24°. *New York*, 1864.

——— The carpenter and joiner's handbook; a treatise on framing hip and valley roofs. *Illus.* 16°. *New York*, 1869.

Holmes, Francis S. Post-pleiocene fossils of South Carolina. 4°. *Charleston, S. C.*, 1860.

Holmes, Oliver Wendell. The human wheel; its spokes and felloes. *See* **Palmer,** B. F.

Holt, Joseph. Before the Hon. Joseph Holt, commissioner of patents, in the matter of the application of Charles Goodyear, for the extension of letters patent granted to him June 15, 1844; for an improvement in india rubber fabrics, etc. 8°. *New York*, 1858. pp. 18. [2 copies.]

——— Extension of the Goodyear patent. Decision of the commissioner. 8°. pp. 9. *n. t. p.*

——— Opinion of, commissioner of patents, given January 28th, 1859, in the matter of the application of Cyrus H. McCormick for an extension of his patent of January 31st, 1845, for an improvement in reaping machines. Extension refused. 8°. *Washington*, 1859. pp. 16. [2 copies.]

Holtzapfel, Carl. Das Schleifen und Poliren der Werkzeuge und Instrumente. Nebst einem Anhange über Graviren, Aetzen und Damasciren. Nach dem 3ten Bande von Holtzapfel's "Turning and mechanical manipulation", deutsch bearbeitet von Carl Hartmann. *Illus.* 8°. *Weimar*, 1853. **200 Neuer Schauplatz der Künste.**

——— Turning and mechanical manipulation; a work of general reference and practical instruction on the lathe, and the various mechanical pursuits followed by amateurs. 3 v. 8°. *London*, 1846. Later ed., 1852.

——— Vollständiges Handbuch der neuesten englischen Werkzeugslehre. Nach den Angaben in London, und nach sonstigen guten Hülfsmitteln für deutsche Bedürfnisse bearbeitet von Carl Hartmann. *Il-*

Digitized by Google

Holtzapfel, Carl—Continued.
lus. 3 Bde. 8°. *Weimar,* 1849-50. **178, 179 Neuer Schauplatz der Künste.**

Homans, Isaac Smith. A cyclopedia of commerce and commercial navigation. *Illus.* 8°. *New York,* 1858.

Homans, Isaac Smith, *jr.* An historical and statistical account of the commerce of the United States; showing the foreign commerce of each state, with the imports from, and exports to each foreign nation, from 1820-1856, and the commerce of the United States with every important maritime country in the world, during the same period; a review of the progress of American commerce, and a sketch of the trade of the American colonies. 8°. *New York,* 1857.

HOME book, American; of practical and scientific information for town and country. *See* **Draper,** Lyman C., and **Croffut,** W. A.

——— Our English; its early history and progress. *See* **Our** English home.

Homes, William. Inaugural address at the opening of the Mercantile library hall. *See* ST. LOUIS. **Mercantile** library association, 1855.

HOMES of other days. *See* **Wright,** Thomas.

——— without hands. *See* **Wood,** J. G.

HOMESTEAD architecture. *See* **Sloan,** Samuel.

Homilius, *Col.* Cours sur la construction et la fabrication des armes à feu. Trad. de l'allemand par Lenglier. *Illus.* 8°. *Paris,* 1848. [2 copies.]

HOMŒOPATHIC family guide. *See* **Ellis,** E. R.

——— medical society of Massachusetts. Publications. *See* MASSACHUSETTS. **Homœopathic** medical society.

——— medicine. *See* **Hahnemann,** Samuel.

——— medicines, Epitome of. *See* **Breyfogle,** William L.

——— remedies; their primary and curative symptoms. *See* **Jahr,** G. H. G.

——— treatise on the diseases of women and children. *See* **Minton,** Henry.

——— treatment of females and children. *See* **Jahr,** G. H. G.

——— veterinary medicine, A new manual of. *See* **Schaefer,** J. C.

HOMŒOPATHY, its nature and principles. *See* **Gleiwitz,** George.

HOMŒOPATHY, Organon of specific. *See* **Hempell,** Charles J.

——— Practical. *See* **Douglass,** J. S.

——— Principles of. *See* **Joslin,** B. F.

——— What is it? *See* **Holcombe,** William H.

Hone, William. The every-day book and table book; or, everlasting calendar of popular amusements, sports, pastimes, ceremonies, manners, customs, and events, incident to each of the 365 days, in past and present times; forming a complete history of the year, months and seasons, and a perpetual key to the almanac. *Illus.* 3 v. 8°. *London,* 1830.

——— The year book of daily recreation and information, concerning remarkable men and manners, times and seasons, solemnities and merry-makings, antiquities and novelties, etc. 8°. *London,* 1832.

HONEY. Hive and honey-bee. *See* **Langstroth,** L. L.

Hood, Charles. A practical treatise on warming buildings by hot water; on ventilation, and the various methods of distributing heat, and their effects on animal and vegetable physiology. To which are added, an inquiry into the laws of radiant and conducted heat, the chemical constitution of coal and the combustion of smoke. 2d ed. *Illus.* 8°. *London,* 1844.

Hood, John W. The principles and practice of medicine. 8°. *Philadelphia,* 1848.

Hooke, Robert. Philosophical experiments and observations of the late eminent Robert Hooke. 8°. *London,* 1726.

Hooker, Joseph Dalton. Himalayan journals; notes of a naturalist in Bengal, the Sikkim and Nepal Himalayas, the Khasia mountains. 2 v. 12°. *London,* 1855.

Hooker, *Sir* William Jackson. Botany. *See* **Herschel,** *Sir* J. F. W. **Manual** of scientific enquiry.

——— Encyclopædia of geography, botany, etc. *See* **Murray,** N.

Hooker, Worthington. Physician and patient; or a practical view of the mutual duties, relations, and interests of the medical profession and the community. 8°. *New York,* 1849.

Hooper, W. Rational recreations, in which the principles of numbers and natural philosophy are clearly and copiously

Digitized by Google

Hooper, W.—Continued.
elucidated by a series of easy, entertaining and interesting experiments. 4 v. 3d ed. 8°. *London*, 1787.

Hoopes, Josiah. The book of evergreens a practical treatise on the coniferæ, or cone-bearing plants. 12°. *New York*, 1868.

Hooson, William. The miners' dictionary; explaining not only the terms used by miners, but also containing the theory and practice of that most useful art of mineing—more especially of lead mines 8°. *Wrexhem*, 1747.

Hooton, F. C. The general and special Pennsylvania road laws. 8°. *West Chester*, 1869.

Hope, Thomas. Costume of the ancients. New ed. 2 v. 8°. *London*, 1841.

—— Household furniture and interior decoration; executed from designs. roy. fol. *London*, 1807.

Hopkins, Edward J. The organ, its history and construction; preceded by a new history of the organ, memoirs of the most eminent builders of the 17th and 18th centuries, and other matters of research in connection with the subject, by Edward F. Rimbault. 8°. *London*, 1855.

Hopkins, Evan. On the connexion of geology with terrestrial magnetism, showing the general polarity of matter, the meridional structure of the crystalline rocks, etc. 8°. *London*, 1844.

Hopkins, Thomas. On winds and storms; with an essay on weather, and its varieties. 8°. *London*, 1860.

Hopkinson, J., and co. The engineer's practical guide, and the working of the steam engine, explained by the use of the indicator. 7th ed. 8°. *Huddersfield*, 1875.

Hoppe, Friedrich. Sammlung der neuesten Constructionen von praktisch ausgeführten Schlosserarbeiten, wie auch der neuesten Erfindungen und Maschinerien zur Beförderung der Schlosserkunst. obl. 4°. *Uttweil, n. d.*

Hoppe, K. Der Bürsten- und Pinselfabrikant. *Illus.* 8°. *Weimar*, 1842. **119 Neuer Schauplatz der Künste.**

Hopper, Edward. Law lexicon; ed. by. *See* **Wharton,** J. J. S.

Hoppus, John. An account of Lord Bacon's Novum organon scientiarum: or, new method of studying the sciences.

Hoppus, John—Continued.
8°. *London.* pp. 40. *n. t. p.* [Bound in a vol. entitled "Tracts".]

Hörmann, A. Die neuen Wasserhaltungsmaschinen auf den Deckenschächten bei Saarbrücken, der Tiefbauanlage zu Rüdersdorf und der Ferdinandsgrube bei Kattowitz. 4° and fol. *Berlin*, 1874.

Horn, Wilhelm. Photographisches Journal; hrsg. v. *See* **Photographisches** Journal.

HORN. Das Beizen, Schleifen und Poliren des Holzes, Elfenbeins, Horns, etc. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

—— Handbuch für Hornarbeiter. *See* **Kühn,** H. **115 Neuer Schauplatz der Künste.**

—— Kennis der Horen. *See* **Numan,** A.

Horner, William E. Special anatomy and histology. 8th ed. 2 v. 8°. *Philadelphia*, 1851.

HOROLOGY. American horological journal. *See* **American.**

—— Description et iconographie des instruments horaires du 16e siècle. *See* **Dubois,** P.

—— Elements of clock and watch-work. *See* **Cumming,** Alexander.

—— Horological journal. *See* LONDON. **British** horological institute.

—— Mechanical philosophy, horology and astronomy. *See* **Carpenter,** W. B.

—— Perspectiva horaria. *See* **Maignan,** Emmanuele.

—— Traité d'horlogerie mécanique et pratique. *See* **Thiout.**

—— Traité d'horlogerie théorique et pratique. *See* **Moinet,** L.

HORSE, The anatomy of the. *See* **Stubbs,** George.

—— Anatomy and physiology of the. *See* **Dadd,** G. H.

—— and horsemanship of the United States, etc. *See* **Herbert,** H. W.

—— The, and other live stock. *See* **Jennings,** Robert.

—— book, The American farmer's. *See* **Stewart,** Robert.

—— Description of the expansive shoe. *See* **Clark,** Bracy.

—— doctor, Every man his own. *See* **Bartow,** F.

—— The educated. *See* **Offutt,** Denton.

Digitized by Google

HORSE farriery, The farmer's practical. *See* **Nash**, E.
——— Foot of the horse. By Bracy Clark. *See* **Science**, Miscellaneous.
——— Haras et remontes. *See* **Dombasle**, C. J. A. Mathieu de.
——— hoeing husbandry. *See* **Tull**, Jethro.
——— The horse's foot. *See* **Miles**, W.
——— The illustrated horse doctor, etc. *See* **Mayhew**, Edward. [?]
——— The illustrated horse management, etc. *See* **Mayhew**, Edward.
——— man and ferrier, The compleat. *See* **De Grey**, Thomas.
——— Morgan. *See* **Linsley**, D. C.
——— owner's guide, The. *See* **Walther**, F. H.
——— The Percheron. *See* **Du Huÿs**, Charles.
——— portraiture. *See* **Simpson**, Joseph Cairn.
——— raising. Gestüte und Meiereien, Württemberg. *See* **Hügel**, J. von, and **Schmidt**, G. F.
——— shoeing, Art of. *See* **Solleysell**, *Sieur* de.
——— ——— Der Hufschmied. *See* **Harzer**, F.
——— ——— Geschichte der Hufbeschlagkunde. *See* **Rueff**, A.
——— ——— Guide to the forge. *See* **Clark**, Bracy.
——— ——— Practical. *See* **Fleming**, G.
——— ——— New system of. *See* **Goodwin**, J.
——— ——— Treatise on. *See* **Miles**, W.
——— Structure, laws and economy of the horse's foot. *See* **Clark**, Bracy.
——— Surgery and medicine of. *See* **Clark**, Bracy.
——— Training made easy. *See* **Jennings**, Robert.
——— Treatise on bits. *See* **Clark**, Bracy.

HORSEMANSHIP. Art de l'équitation. *See* **Lebeaud. 73 Manuels Roret.**
——— Equestrian education. *See* **Astley**, Philip.
——— Manuel d'équitation. *See* **Vergnaud**, A. D. **14 Manuels Roret.**
——— Military equitation. *See* **Pembroke**, Henry, *Earl of.*
——— A new method of. *See* **Baucher**, F.
——— Practical instruction in. *See* **De Kieffer**, Eugene.
——— The science of. *See* **Danforth**, A. H.

HORSEMANSHIP. Young lady's equestrian manual. *See* **Young** lady's.

Horsfall, Thomas. System of dairy management. *See* **Flint**, C. L. **Milch** cows and dairy farming.

Horsford, E. N. Report on Vienna bread. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873: v. 2.**

HORTICOLA. Hints on the propagation and general treatment of American varieties of the grape vine. *See* **Mohr**, Frederick.

HORTICULTURAL implements. Catalogo descriptivo de instrumentos de horticultura. *See* Allen, A. B., and co.
——— ——— Catalogue of. *See* Allen, A. B., and co.
——— ——— Catalogue of. *See* Coyle, F.
——— ——— Catalogue of. *See* Nourse, Mason and co.
——— ——— Catalogue of. *See* Ralph and co.
——— ——— Catalogue of. *See* Rapalje, J., and co.

HORTICULTURE. American horticultural annual. *See* **American**, etc.
——— Exposition de 1855. Société impériale et centrale d'horticulture. Procès-verbaux des séances du jury, etc. *See* PARIS. **Société** impériale.
——— The horticulturist. *See* **Loudon**, J. C.
——— Hortus gramineus Woburnensis. *See* **Sinclair**, George.
——— Le jardinier solitaire. *See* **Gentil**, Francis.
——— Journal de la Société impériale et centrale d'horticulture. *See* PARIS. **Société** impériale.
——— Magazine of. *See* **American** farmer.
——— Magazine of. *See* **Hovey**, C. M.
——— Maison rustique du 19e siècle. *See* **Maison** rustique.
——— Manuel du grainier-pépiniériste horticulteur. *See* **Julia de Fontenelle**, J. S. E., and **Tollard**, H. **43 Manuels Roret.**
——— Ohio cultivator. *See* **Ohio** cultivator.
——— Rural essays. *See* **Downing**, A. J.
——— The theory of. *See* **Lindley**, John.
——— Wein-, Obst- und Gemüsebau. Von H. Goethe. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

Digitized by Google

Horticulturist (The) and journal of rural art and taste; devoted to horticulture, landscape gardening, rural architecture, botany, pomology, entomology, rural economy, etc. Ed. by Peter B. Mead. v. 1-27, 1848-75. 8°. *New York*, 1848-75——. [Continued as the "Gardener's monthly", v. 1-2, 1876——.]

HOSIERY and lace manufactures. A history of. *See* **Felkin**, William.

——— Manuel du bonnetier et du fabricant de bas. *See* **Leblanc**, V., and **Préaux**, Caltot. **98 Manuels Roret.**

——— A treatise on haberdashery and hosiery. *See* **Perkins**, E. E.

Hosking, William. Theory and architecture of bridges. *See* **Weale**, J. **Theory** of bridges, v. 2.

Hoskins, Thomas H. What we eat. An account of the most common adulterations of food and drinks; simple tests by which many of them may be detected. 12°. *Boston*, 1861.

HOSPITAL cars, Description of the models of. *Philadelphia*, 1876. *See* UNITED STATES. **War** department.

——— A history of the Massachusetts general. *See* **Bowditch**, N. I.

——— reports, Pennsylvania. *See* PENNSYLVANIA.

——— steam vessels. Description of the models exhibited. *Philadelphia*, 1876. *See* UNITED STATES. **War** department.

HOSPITALS. Bau der Krankenhäuser. *See* **Degen**, L.

——— British, French and American. *See* **Maxson**, Edward R.

——— The construction of. *See* **Galton**, Douglas.

——— Description of the models exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

Hoste, P. A compendious course of practical mathematicks; particularly adapted to the use of the gentlemen of the army and navy. Transl. from the French, by William Webster. 2d ed. 3 v. 18°. *London*, 1751.

HOT-HOUSES. Art de construire les serres. *See* **Neumann**.

——— The hot-house gardener. *See* **Abercrombie**, John.

——— Manuel du jardinier des primeurs. *See* **Noisette** and **Boitard**, P. **94 Manuels Roret.**

Hough, Franklin B. Census of New York, 1855; prepared by. *See* NEW YORK. **Census.**

Hough, Lewis S. The science of man, applied to epidemics; their cause, cure, and prevention. 16°. *Boston*, 1849.

Houghton, Roland S. Bulwer and Forbes on the water-treatment. A compilation of papers on the subject of hygiene and rational hydropathy; ed. by. 12°. *New York*, 1851.

HOUSE book; or, family chronicle of useful knowledge. *See* **Scott**, William.

——— work. Nationale Hausindustrie. Von Carl Richter. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 21.**

Household (The). A book of reference upon subjects relating to domestic economy and home enjoyment. 8°. *London*, 1866.

——— economy. Das goldene Buch. *See* **Goldene** Buch.

——— ——— Das Goldene Buch, oder der ökonomische Hausschatz. *See* **Bauer**, Heinrich.

——— ——— What I know; or, hints on the daily duties of a housekeeper. *See* **Nicholson**, Elizabeth.

——— manuals. 10 v. bound in 3. 24°. *London*, 1867.

CONTENTS.

v. 1. How to cook rabbits. By G. Hill.
v. 2. How to cook fish. By G. Hill.
v. 3. How to cook apples. By G. Hill.
v. 4. How to cook game. By G. Hill.
v. 5. Home nursing. By G. P.
v. 6. Dinners and housekeeping. By G. P.
v. 7. Good food, what it is, and how to get it By E. Lankester.
v. 8. How to preserve fruit. By G. Hill.
v. 9. How to cook vegetables By G. Hill.
v. 10. How to cook onions. By G. Hill.

——— pets, and how to manage them, containing valuable instruction about the diseases, breeding, training, and management of Canary birds. *See* **Book** of household pets.

HOUSEKEEPER and gardener. *See* **Upton**, Rebecca A.

HOUSEKEEPER'S guide and everybody's handbook. *See* **Smith** and **Swinney.**

HOUSEWIFE, The modern. *See* **Soyer**, A.

——— The practical. *See* **Practical** housewife.

Digitized by Google

HOUSEWIFE'S manual. *See* **Victor,** *Mrs.*

Houssaye, J. C. Monographie du thé; description botanique, torréfaction, composition chimique, propriétés hygiéniques de cette feuille. *Illus.* 8°. *Paris,* 1843.

Hovey, C. M. The magazine of horticulture, botany and all useful discoveries and improvements in rural affairs. v. 24–34, 1858–68. 8°. *Boston,* 1858–68.

How, James. On the production of positive proofs from waxed paper, collodion, and other negatives. 12°. *London,* 1855. pp. 23.

How, Thomas P. Before the Hon. William M. Merrick. In the matter of the interference declared between the applications of William Palmer and Edward Nugent, for patents for improvements in revolving fire-arms. Argument. 8°. *New York,* 1862. pp. 30.

How to do it; or, directions for knowing and doing everything needful. 12°. *New York,* 1864.

Howard, Conway R. Earthwork mensuration on the basis of the prismoidal formula; containing a labor-saving method of obtaining prismoidal contents directly from areas. *Illus.* 8°. *New York,* 1874.

Howard, Frank. The sketcher's manual; or, the whole art of picture making. 24°. *London,* 1837.

Howard, John H. Athletic and gymnastic exercises. *Illus.* 8°. *London.* 1860.

Howard, Thomas. Method of vaporization. *See* **Tredgold,** T. **Steam** engine, 1st series.

Howe, *Captain.* Self-reefing topsails, invented by. *See* **Kipping,** R

Howe, Henry. Memoirs of the most eminent American mechanics: also, lives of distinguished European mechanics; with a collection of anecdotes, descriptions, etc., relating to the mechanic arts. *Illus.* 12°. *New York,* 1847.

Howison, George H. A treatise on analytic geometry, especially as applied to the properties of conics, including modern methods of abridged notation. 8°. *Cincinnati,* 1869.

HOWITZER, The naval. *See* **Parker,** Foxhall, A.

Howlett, Robert. On the various methods of printing photographic pictures upon paper, with suggestions for their preservation. 8°. *London,* 1856. pp. 32.

Howson, Charles. United States patents. *See* **Howson,** Henry and Charles.

Howson, Henry. Our country's debt to patents. *See* **United States** patent association.

——— and Charles. A brief inquiry into the principles, effects and present state of the American patent system; with the laws of the United States relating to patents, trade marks, and copyrights. 8°. *Philadelphia,* 1872.

——— ——— A brief treatise on United States patents, for inventors and patentees. 16°. *Philadelphia,* 1876.

Hoyle's games; an improved miniature edition. Games with cards; viz., whist, cribbage, loo, etc. Games of chess, billiards and cricket. 24°. *London,* 1866.

Hoyne, Temple S. Classification of a few of the "new remedies" according to the parts of the body acted upon. 8°. *St. Louis,* 1868.

Hoyt, Charles N. The game of red, white and blue; to be played on a shield of the United States, by two persons, with dice, or a teetotum. 16°. *Providence, R. I.,* 1867. pp. 4.

Hoyt, John W. Report on education. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 6.**

——— Report on education. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

Hubbell, William W. Argumen s of William W. Hubbell on behalf of the defendants, before Hon. Samuel Nelson, in the case of Ross Winans vs. Orsamus Eaton et al.; against a motion for an injunction to restrain the defendants from constructing and vending the railroad cars commonly known as the "eight-wheel railroad car," alleged to infringe Ross Winans' patent of Oct. 1, 1834. 8°. *Albany,* 1853. [2 copies.]

Huber, François. Observations on the natural history of bees: new ed., with a memoir of the author, practical appendix and analytical index. *Illus.* 12°. *London,* 1841.

Hübner, Otto. Die Banken. 8°. *Leipzig,* 1854.

——— Jahrbuch für Volkswirthschaft und Statistik. Jahrg. 3, 5. 8°. *Leipzig,* 1855–57.

——— Statistische Tafel aller Länder der

Digitized by Google

Hübner, Otto—Continued.
Erde. [1 sheet folded in 8°.] *Leipzig*, 1854.

——— Die Zolltarife aller Länder gesammelt, uebersetzt, geordnet. Mit Angabe des Silberwerthes der verschiedenen Zollwährungen in Thalern und Gulden; mit Berechnung der fremden Maasse und Gewichte in österreichische, preussische, bayerische Maasse und deutsches Zollgewicht, und mit einer vergleichenden Tafel wichtigsten Zollsätze der grösseren Handelsstaaten. 8°. *Leipzig*, 1852.

Huc, E. Recollections of a journey through Tartary, Thibet, and China, during the years 1844, 1845, and 1846. 2 v. 12°. *New York*, 1852.

HUDSON'S bay company. Documents under which the company claim title to the Hudson's bay territory. *See* CANADA

Hueffer, F. The life of the Greeks and Romans; transl. by. *See* **Guhl,** E., and **Koner,** W.

Huff, Gershom. Electro-physiology. A scientific, popular, and practical treatise on the prevention, causes, and cure of disease; or electricity as a curative agent, supported by theory and fact. 12°. *New York*, 1853.

Hügel, J. von, and **Schmidt,** G. F. Gestüte und Meiereien Seiner Majestät des Königs Wilhelm von Württemberg. 8°. *Stuttgart*, 1861.

Huggins, William. On the transit of Venus. **Science lectures for the people, series 6.**

——— Spectrum analysis, in its application to the heavenly bodies. **Science lectures for the people, series 2.**

Hughes, D. E. Expériences sur la forme et la nature des électro-aimants. 8°. *Paris*, 1864. pp. 11.

Hughes, Jabez. The principles and practice of photography familiarly explained. 2d ed. 8°. *London*, 1861. *Also*, 7th ed., 1866.

——— Silver sunbeam. *See* **Towler,** J.

Hughes, Samuel. Bangor slate quarries. **Weale's papers on engineering, v. 3.**

——— Memoir of J. Brindley. **Weale's papers on engineering, v 1.**

——— Memoir of W. Jessop. **Weale's papers on engineering, v. 1.**

——— Survey of metropolitan roads. *See* **Law,** H. **Weale's series, No. 46.**

Hughes, Samuel. A treatise on gas-works and the practice of manufacturing and distributing coal gas; with some account of the most important methods of distilling coal in iron, brick and clay retorts, and of the modes adopted for purifying coal gas. A chapter on hydro-carbon or water gas, and on the rating of gas-works in parochial assessments. 12°. *London*, 1853. **Weale's series, Nos. 82**, 83*.**

——— A treatise on water-works for the supply of cities and towns; description of the principal geological formations of England as influencing supplies of water; details of engines and pumping machinery for raising water, and descriptions of works which have been executed for procuring water from wells, rivers, springs, and drainage areas. 12°. *London*, 1856. **Weale's series, No. 82***.**

Hughes, T. Papers on foundations. *See* **Weale,** J. **Theory** of bridges, v. 1.

Hughes, Thomas. The practice of making and repairing roads; of constructing footpaths, fences and drains: also a method of comparing roads with reference to the power of draught required. 8°. *London*, 1838.

Hughes, William. An atlas of classical geography; ed. by George Long, with a sketch of ancient geography. 4°. *Philadelphia*, 1856.

Hughes, William Carter. The American miller and millwright's assistant. 12°. *Philadelphia*, 1851. New ed., 1862.

Hugo, D. Antonius. Analysis geometrica, sive nova et vera methodus resolvendi, tam problemata geometrica, quam arithmeticas questiones: pars prima de planis. sm. 4°. *Gadis*, 1698.

Huguenet, Isidor. Ueber den Asphalt, dessen Vorkommen, Beschaffenheit, Darstellung als Asphalt-Mastix, sowie über seine Benutzung als natürlicher Mörtel, besonders zu Fussböden, Trottoirs und Dächern: nach den bis zum Jahre 1847 damit gemachten Erfahrungen. Aus dem Französischen von Carl Hartmann. *Illus.* 8°. *Weimer*, 1847. **154 Neuer Schauplatz der Künste.**

Huish, Robert. Bees: their natural history and general management; an examination of the various systems of native and foreign apiarians; with an analytical exposition of the errors of Huber; containing also, the latest discoveries and

Digitized by Google

Huish, Robert—Continued.
improvements. New ed. 8°. *London*, 1844.

Hull, Edward. The coal fields of Great Britain: their history, structure, and duration. With notices of the coal fields of other parts of the world. *Illus.* 16°. *London*, 1861.

Hullmandel, C. The art of drawing on stone. *Illus.* New ed. 8°. *London*, 1835.

——— Manual of lithography; transl. by. *See* **Raucourt.**

HULME. Manchester free libraries. Catalogue of Hulme lending branch. *See* MANCHESTER.

Hulot. Art du tourneur méchanicien, par. PARIS. **Acad. roy. des sc., arts et métiers, v. 20.**

Hülsse, Julius Ambrosius. Allgemeine Maschinen-Encyclopädie. Im Verein mit G. Altmüller und Burg, T. Fischer und M. F. Gätzschmann, A. Hallbauer, K. Karmarsch, M. Rühmann, F. Reich, J. Schneider, W. Schwamkrug, A. Weinlig, E. Weinlig und J. Weisbach, hrsg. von. B. 1-2. (A—Can.) Text, 2 v., 8°; atlas, 2 v., fol. *Leipzig*, 1841-44.

——— Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

——— Sammlung mathematischer Tafeln. *See* **Vega,** Georg.

——— Die Technik der Baumwollenspinnerei, ihre Fortschritten in den letzten fünfundzwanzig Jahren und ihr gegenwärtiger Zustand. *Illus.* 8°. *Stuttgart*, 1857.

——— Ueber die Berechnung von Beobachtungen durch die Methode der kleinsten Quadratsummen. *Leipzig*, 1841. pp. 15.

HUMAN body, Wonders of the. *See* **Le Pileur, A.**

——— electricity. *See* **Rutter,** J. O. N.

——— physiology. *See* **Dalton,** John C.

——— species, The natural history of the. *See* **Smith,** Charles Hamilton.

Humber, William. A complete treatise on cast and wrought iron bridge construction, including iron foundations; theoretical, practical and descriptive. 3 parts. 2d ed. Text and atlas, fol. *London*, 1864.

——— A practical treatise on cast and wrought iron bridges and girders, as applied to railway stuctures, with examples drawn on a large scale from public works of eminent engineers. fol. *London*, 1857.

——— A record of the progress of modern engineering; comprising civil, mechanical, marine, hydraulic, railway, bridge and other engineering works: with essays and reviews. *Illus.* 4°. *London*, 1863. *Also* ed. 1864.

Humble, William. Dictionary of geology and mineralogy; comprising such terms in natural history as are connected with geology. 3d ed. 8°. *London*, 1860.

HUMBLE creatures; the earthworm and the common house fly. *See* **Samuelson,** James, and **Hicks,** J. Braxton.

Humblot-Conté. Rapport sur le prix relatif à l'application aux exploitations rurales d'un moulin à blé, d'une construction solide et économique. 8°. *Paris*, 1824. pp. 15. *n. t. p.*

Humboldt, Friedrich Heinrich Alexander von. Cosmos: sketch of a physical description of the universe; transl. under the superintendence of Edward Sabine. 4 v. 8°. *London*, 1847-58.

——— Versuche über die gereitzte Muskel- und Nervenfaser, nebst Vermuthungen über den chemischen Process des Lebens in der Thier- und Pflanzenwelt. B. 1-2 [bound in 1]. 8°. *Posen und Berlin*, 1797.

——— Denkrede auf. *See* **Martius,** C. F. P. von.

——— and **Bonpland,** A. Essai sur la géographie des plantes, accompagné d'un tableau physique des régions équinoxiales. 4°. *Paris*, 1805.

Hume, Abraham. The learned societies and printing clubs of the United Kingdom; compiled from official documents. Supplement, by A. J. Evans. 8°. *London*, 1856.

Humphrey, S. D. American handbook of the daguerreotype; containing the daguerreotype, electrotype, and various other processes employed in taking heliographic impressions. 5th ed. 12°. *New York*, 1858.

——— A system of photography; containing a detail of the whole process of daguerreotype, of galvanizing electrotype, calotype, and hyalotypes, or portraits on plate glass; also, M. Becquerel's process for producing daguerreotypes with the colors of nature. 2d ed. *Albany*, 1849.

Humphrey's journal of the daguerreotype and photographic arts, and the sciences and arts appertaining to heliography

Digitized by Google

Humphrey's journal, etc.—Continued. v. 1-21, 1851-69. [Ed. by J. Towler from v. 14.] *New York*, 1851-69.

Humphreys, Andrew A. Report on materials for defensive armor. *See* UNITED STATES. **War dept. Professional papers of corps of engineers, No. 17.**

—— and **Abbot,** Henry L. Report upon the physics and hydraulics of the Mississippi river; upon the protection of the alluvial region against overflow; and upon the deepening of the mouths. Submitted to the bureau of topographical engineers, War department, 1861. 4°. *Philadelphia*, 1861.

Humphreys, H. Noel. A history of the art of printing, from its invention to its wide-spread development in the middle of the 16th century; also, an account of the origin of the alphabet. 4°. *London*, 1867.

Hunäus, G. Christian K. Die geometrischen Instrumente der gesammten praktischen Geometrie, deren Theorie, Beschreibung und Gebrauch. *Illus.* 8°. *Hannover*, 1864.

Hundert mikroskopische Praeparate, aus dem Thier- und Pflanzenreich. Hrsg. von dem mikroskopischen Institut von Engell und Co. 8°. *Wien, Bern und Magdeburg*, 1854-55.

Hundertundsiebenzehn Vorschriften den grösztеn Nutzen aus den Kartoffeln zu ziehen. Nach den Erfahrungen von Jacobi, Juch, Keyssig, Lampadius, Leuchs, Payen, Putsche, Riem, Schwarz, Ternaux, und Anderer. *Illus.* sm. 8°. *Nürnberg*, 1833.

HUNGARIAN leather. L'art de l'hongroyeur. Par J. J. Le F. de La Lande. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

HUNGARY. A Magyar Természettudományi Társulat Évkönyvei Negyedik Kötet 2. füzetben 1851-'59. Közlönye: Elsö Kötet 3 füzet 1860. Második Kötet 2 füzet 1861. Harmadik Kötet. Második rész 1862. Vegyes Kötetek, 1865-1873. 8°. *Pesten*, 1857-73.

Hungerbyhler. Olio ricino volgare, opuscolo aggiuntivo. *See* **Bonelli,** Giorgio.

Hunt, Freeman. Worth and wealth; a collection of maxims, morals, and miscellanies, for merchants and men of business. 12° *New York*, 1856.

Hunt, John Warren. Wisconsin gazetteer. 8°. *Madison*, 1853.

Hunt, Richard M. Designs for the gateways of the southern entrances to the Central park, with description of the designs. 4°. *New York*, 1866.

Hunt, Robert. Dictionary of arts, etc., ed. by; also supplement, ed. by. *See* **Ure,** A.

—— Handbook to the industrial department of the international exhibition, 1862. 2 v. 8°. *London*, 1862.

—— Hand-book to the official catalogues. An explanatory guide to the natural productions and manufactures of the great exhibition of the industry of all nations, 1851. 2 v. 12°. *London*, 1851.

—— A manual of photography. *Illus.* 4th ed. 8°. *London*, 1854.

—— Same. 5th ed. *London and Glasgow*, 1857.

—— The poetry of science, or studies of the physical phenomena of nature. 2d ed. 8°. *London*, 1849.

—— Researches on light; an examination of all the phenomena connected with the chemical and molecular changes produced by the influence of the solar rays; embracing all known photographic processes and new discoveries in the art. 8°. *London*, 1844.

Hunter, Alfred. Catalogue of the models of patents. *See* UNITED STATES. **Interior** dept. Patent office.

Hunter, John. Natural history of the human teeth; explaining their structure, use, formation, growth, and diseases; with notes, by Eleazer Parmly. Part 2d. Treatise on the diseases of the teeth. *Illus.* 8°. *New York*, 1839. **American library of dental science, v. 1.**

Hunter, Joseph. The Hallamshire glossary. 12°. *London*, 1829.

HUNTING. Manuel du chasseur. *See* **Mersan,** M. de. **120 Manuels Roret.**

Huntington, D. L. Description of the United States army transport cart, exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

Hüpscher, J. Schreibunterricht. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Hurcourt, E. Robert d'. De l'éclairage au gaz; développements sur la composition des gaz destinés à l'éclairage; sur la

Digitized by Google

Hurcourt, E. Robert d'—Continued. construction des fourneaux et des cheminées, sur la pose des tuyaux, sur les phénomènes de la lumière, etc. *Illus.* 2e éd. Texte, 8°; pl., 4°. *Paris*, 1863.

Hurd, Seth T. A grammatical corrector; or, vocabulary of the common errors of speech. 12°. *Philadelphia*, 1847.

Husband, Joshua L. Improvement in propellers. Argument on application for letters patent. *See* **Titus,** John.

HUSBANDRY, Dictionary of. *See* **Complete farmer.**

——— Modern. *See* **Andrews,** G. H.

——— The natural laws of. *See* **Liebig,** Justus von.

Husmann, George. The cultivation of the native grape, and manufacture of American wines. 12°. *New York*, 1866.

Huss, H. Der gesammte Brennerei-Betrieb. Praktisch-theoretisches Handbuch umfassend die Kartoffelkorn-Melassenbrennerei, etc., für rationell arbeitende Brenner. 8°. *Berlin*, 1871.

Hussey, Obed, Review of the pamphlet of Fitzgerald, in opposition to the extension of the patent of. *See* **Review.**

HUTCHESON bridge, Glasgow, Account of the, by L. Hill. *See* **Weale,** J. **Theory** of bridges, v. 1.

Hutchinson, Henry. A treatise on the practical drainage of land. 8°. *London*, 1844.

Huth, Friedrich Wilhelm. Handbuch der Kochkunst. Zweite stark vermehrte und verbesserte Auflage von F. Rothmaler. 8°. *Weimar*, 1834. **13 Neuer Schauplatz der Künste.**

Huttmann, L. Gesetze der Farbenharmonie: übers. v. *See* **Hay,** D. R. **172 Neuer Schauplatz der Künste.**

——— Gründlicher und kunstgemässiger Unterricht in der Cementir-, Tüncher- und Stuccaturarbeit. *Illus.* 8°. *Weimar*, 1842. **18 Neuer Schauplatz der Künste.**

Hutton, Charles. A philosophical and mathematical dictionary: containing an explanation of the terms, and an account of the several subjects comprised under the heads mathematics, astronomy, and philosophy, both natural and experimental: with an historical account of the rise, progress, and present state of these sciences: also memoirs of the lives and writings of the most eminent authors. 2 v. [bound in 1]. New ed. *Illus.* 4°. *London*, 1815.

Hutton, James. A dissertation upon the philosophy of light, heat, and fire. 7 parts. 8°. *Edinburgh*, 1794.

——— Theory of the earth; with proofs and illustrations. 2 v. 8°. *Edinburgh*, 1795.

Huxley, Thomas H. Coral and coral reefs. **Science lectures for the people, series 2.**

——— Evidence as to man's place in nature. 8°. *London*, 1863.

——— Lay sermons, addresses, and reviews. 12°. *New York*, 1871.

——— Natural history review; ed. by. *See* **Natural** history.

——— On yeast. **Science lectures for the people, series 3.**

——— The physical basis of life. **University series, No. 1.**

HYALOTYPES. Portraits on plate glass. *See* **Humphrey,** S. D.

Hyatt, Thaddeus. Applicant's testimony in the matter of the application of Thaddeus Hyatt, for an extension of letters patent, dated Nov. 12th, 1845, for an illuminating vault cover. Charles M. Keller, counsel for applicant. 8°. *New York*, 1859.

——— Application for extension, for illuminating vault covers: argument. *See* **Keller,** C. M.

Hyde, James F. C. The Chinese sugar cane; its history, mode of culture, manufacture into sugar, etc. 18°. *Boston*, 1857.

Hyde, John T. Elements of gunnery; forming part 2d of the Treatise on fortifications and artillery, as revised and rearranged by the late Thomas Cook, from the original work of H. Straith. 8°. *London*, 1861.

HYDRAULIC engineering. *See, also,* **Engineering,** Hydraulic.

——— ——— Constructionen aus dem Gebiete des Wasserbaues. *See* CARLSRUHE.

——— ——— Della laguna de Venezia e dei fiume. *See* **Vacani di Forteolivo, Camillo.**

——— ——— Recherches sur la fondation par immersion des ouvrages hydrauliques. *See* **Beaudemaulin,** L. A.

——— ——— Report on. By C. Davis. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 3.**

——— ——— Seeufer- und Hafenbau. *See* **Hagen,** G.

Digitized by Google

HYDRAULIC engineering. Seeufer- und Hafenbau. *See* **Schwarz**, F.

—— machines. Konstruktion der Pumpen, Saugapparate, etc. *See* **Hoelder**, Georg. **280 Neuer Schauplatz der Künste.**

—— —— Des machines hydrauliques. *See* **Borgnis**, J. A. **Mécanique** appliquée aux arts, v. 4.

—— mortars. Die hydraulischen Mörtel, etc. *See* **Michaëlis**, W.

—— motors. *See* **Bresse**, M.

HYDRAULICS. Abridgments English Patents, No. 32.

—— Account of hydraulic and other machines for raising water. *See* **Ewbank**, T.

—— Architecture hydraulique. *See* **Bélidor**, B. F. de.

—— Brunnen-, Röhren-, Pumpen- und Spritzenmeister, auch Bleiarbeiter. *See* **Janvier** and **Biston. 45 Neuer Schauplatz der Künste.**

—— Concours pour les machines hydrauliques appropriées aux usages de l'agriculture. *See* **Challan**, A. D. J. B., **de Chassiron, de Lasteyrie, Yvart**, and **de Perthius.**

—— Cours de mécanique appliquée. *See* **Bresse**, M.

—— Die Experimental-Hydraulik. *See* **Weisbach**, J.

—— Handbuch der Wasserbaukunst. *See* **Hagen**, G.

—— Hydraulic experiments. *See* **Beaufoy**, M.

—— Hydraulische Motoren, Turbinen, Wasserräder, etc. *See* **Neumann**, Friedrich.

—— Hydromechanik. *See* **Rühlmann**, M.

—— Lowell hydraulic experiments. *See* **Francis**, J. B.

—— Méchanisme des mouvemens des corps flotans. *See* **La Croix**, —— de.

—— Notes sur l'hydraulique. *See* **Bélanger**, J. B. C. J.

—— Nouvelle architecture hydraulique. *See* **Prony**, R.

—— Researches in hydraulics. By R. A. Peacocke. *See* **Weale's papers on engineering, v. 5.**

—— System of. *See* **Switzer**, S.

—— Théorie des moteurs hydrauliques. *See* **Gérardin**, H.

—— Traité des constructions hydrauliques. *See* **Rofflaen**, E.

HYDRAULICS. Traité des moteurs hydrauliques. *See* **Armengaud, aîné.**

—— Treatise on. *See* **Aubuisson de Voisins**, J. F. de.

—— Treatise on hydraulics. By J. Millington. *See* LONDON. **Society of useful knowledge, v. 1.**

—— Unterricht im Wasserbau. *See* **Kirn**, von.

—— Wasser-Förderung. *See* **Haindl**, S.

—— Wasser- und Strassen-Baukunde. *See* **Schauffer**, Wenzel.

—— Water power at Lowell. *See* **Francis**, J. B., and **Baldwin**, J. F.

HYDRO-DYNAMICS. Hydrodynamica. *See* **Bernoulli**, Daniel.

—— A treatise on. *See* **Besant**, W. H.

HYDROGRAPHY. By F. W. Beechey. *See* **Herschel**, *Sir* J. F. W. **Manual** of scientific enquiry.

—— Méthode pour la levée et la construction des cartes et plans hydrographiques. *See* **Beautemps-Beaupré**, C. F.

—— Physical atlas. *See* **Johnston**, A. K.

—— Reports of the commissioners and secretary of the Maine hydrographic survey. *See* MAINE.

HYDROKONION, or catarrh. *See* **Pratt** S. Clesson.

HYDROMETER, Action of Sike's. *See* **Keene**, J. B.

—— Manual of the. *See* **Swift**, Lionel.

HYDROMETRY. Instrumente der Hydrometrie. *See* **Engelbreit**, K.

HYDROPATHY, Facts in. *See* **Shew**, Joel.

—— Practical. *See* **Smedley**, John.

HYDROSTATIC balance. *See* **Becket**, J. B.

HYDROSTATICS and hydro-dynamics. *See* **Moseley**, Henry.

—— Die Lehren der Hydrostatik. *See* **Newth**, S. **190 Neuer Schauplatz der Künste.**

—— Mechanics of fluids, comprising. *See* **Jamieson**, A.

—— System of. *See* **Switzer**, S.

—— Treatise on. *See* **Besant**, W. H.

—— Treatise on. *See* **Lardner D. Lardner's cabinet cyclopædia, v. 103.**

—— Treatise on. By Lord Brougham. LONDON. **Society of useful knowledge, v. 1.**

HYGIENE. Des soins à donner à la santé *See* **Rion**, A.

Digitized by Google

HYGIENE. Gérocomie; ou code physiologique et philosophique. *See* **Gérocomie.**

——— How not to be sick. *See* **Bellows,** Albert J.

——— Instruments and apparatus of. By T. W. Evans. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

——— Manuel d'hygiène. *See* **Morin,** M. **121 Manuels Roret.**

——— Mental. *See* **Sweetser,** William.

——— A treatise on hygiene, with special reference to the military service. *See* **Hammond,** William A.

——— Young woman's book of health. *See* **Alcott,** William A.

HYGROMETER, Account of a new. *See* **Deluc,** M. J. A.

HYGROMETRY. Beurtheilung hygrometrischer Methoden. *See* **Vogel,** A.

HYPODERMIC medication. *See* **Bartholow,** Roberts.

HYPSOMETRY. Handbuch der barometrischen Höhenmessungen. *See* **Schreiber,** Paul.

HYTHE, Handbook for; a familiar explanation of the laws of projectiles. *See* **Busk,** H.

Ibbetson, John Holt. Specimens of eccentric circular turning; with practical instructions for producing corresponding pieces in the art. 3d ed. 8°. *London, n. d.*

ICE cave of Dobsinai. *See* **Krenner,** J. A.

——— houses. Der Bau des Eis-Kellers, sowohl in wie über der Erde, und das Aufbewahren des Eises in demselben. *See* **Menzel,** C. A.

——— ——— Der Eiskellerbau in Massiv- und Holz-Construction. *See* **Schlesinger,** Isidor.

ICHTHYOLOGY and herpetology, Elements of. *See* **Ruschenberger,** W. S. W.

——— Fresh-water fishes of North America. By C. Girard. **Smiths'n contrib., v. 3.**

——— of South Carolina. *See* **Holbrook,** John Edwards.

ICONOGRAPHY. Iconographic encyclopædia. *See* **Heck,** J. G.

——— Iconographie de la faïence. *See* **Mareschall,** M. A. A.

ICONOLOGY. Iconologia. *See* **Ripa,** Cesare.

——— Iconologie ou la science des emblèmes, devises, etc., qui apprend à les expliquer, dessiner et inventer, tirées la pluspart de César Ripa, par J. B. *See* **Ripa,** Cesare.

IDAHO and Montana gold regions. *See* **Campbell,** J. L.

IDEAS, Innate, of memory and instinct. *See* **Perthes,** Boucher de.

IDIOCY, its treatment. *See* **Seguin,** Edward.

ILLINOIS, School laws of, as amended Feb. 16, 1855; with official and judicial decisions in relation to common schools. 2d ed. Rev. by Newton Bateman. 8°. *Springfield,* 1866.

——— southern railroad, Report on the survey of. *See* **Jennings,** C.

ILLUMINATING. Album du moyen âge. *See* **Midolle,** J.

——— and missal painting. *See* **Audsley** W. and G.

——— The art of illuminating as practised in Europe from the earliest times. *See* **Tymms,** W. R., and **Wyatt,** M. D.

——— The art of illuminating as practised in Europe from the earliest times, illustrated by borders, initial letters and alphabets. *See* **Tymms,** W. R.

——— Hints on. *See* **Lucien,** Henry Montanell.

——— History, theory and practice of. *See* **Wyatt,** M. D., and **Tymms,** W. R.

ILLUMINATION. Abridgments English Patents, No. 44.

——— De la pression du gaz d'éclairage, et des moyens à employer pour la régulariser. *See* **Girond,** H.

——— Petroleum as an illuminator. *See* **Chandler,** C. F.

Illustrated catalogue of statuary, fountains, vases, etc., manufactured by the J. L. Mott iron works. fol. *New York,* 1875.

——— library of wonders. 12°. *New York,* 1867–70.

CONTENTS.

v. 1. The sublime in nature. By F. De Lanoye.
2. Glass making in all ages. By A. Sauzay.
3. The sun. By B. Guillemin and A. L. Phipson.
4. Thunder and lightning. By W. De Fonvielle.
5. Italian art. By Louis Viardot.
6. Architecture. By M. Lefèbre.
7. Lighthouses and light ships. By W. H. D. Adams.

——— London news. v. 1–67, 1842–77. *London,* 1842–77——.

——— magazine of art; containing selections from the various departments of painting, sculpture, architecture, history, biography, art, industry, manufactures,

Digitized by Google

Illustrated magazine of art—Continued.
scientific inventions and discoveries, local and domestic scenes, ornamental works, etc. 2 v. fol. *London*, 1853.

——— monthly, Demorest's. *See* **Demorest**, W. Jennings.

——— polytechnic review and weekly record of science, the fine arts, and literature. 2 v. 4°. *London*, 1843–44.

Illustrirte landwirthschaftliche Dorfzeitung. Hrsg. von William Löbe. Jahrg. 16–21. 4°. *Leipzig*, 1855–60.

——— Monatshefte für Obst- und Weinbau. Organ des Deutschen Pomologen-Vereins. Unter der Redaction von J. G. C. Oberdieck, P. Fehleisen und Eduard Lucas. Jahrg. N. F. 2–4, 1866–68. 3 Bde. 8°. *Ravensburg*, 1866–68.

——— Zeitung. Verzeichniss der in Band i–v. enthaltenen Abbildungen von welchen clichés in scharfen Bleiabgüssen abgegeben werden. 8°. *Leipzig*, 1846. pp. 34.

Illustrirter Kalender für die deutschen Haus- und Landwirthe auf das Jahrg. 1859–1860, von William Löbe. 2 Bde. 18°. *Leipzig*, 1859–60.

——— Kalender für 1858. Jahrbuch der Ereignisse, Bestrebungen und Fortschritte im Völkerleben und im Gebiete der Wissenschaften, Künste und Gewerbe. Jahrg. 13–31, 1858–76. *Illus.* 18 Bde. 4°. *Leipzig*, 1858-76——.

——— Katalog der Pariser Industrie-Ausstellung von 1867. 4°. *Leipzig*, 1868.

Illustrirtes Handbuch der Obstkunde. Unter Mitwirkung Mehrerer herausgegeben von F. Jahn, E. Lucas und J. G. C. Oberdieck. Jahrg. 1–17, 1860–67. 4 Bde. 8°. *Stuttgart*, 1860–67.

Imison, John. Elements of science and art; being a familiar introduction to natural philosophy and chemistry; their application to a variety of elegant and useful arts. New ed., adapted to the improved state of science, by Thomas Webster. 2 v. 8°. *London*, 1808.

IMMIGRANTS in Pennsylvania, Thirty thousand names of. *See* **Rupp**, J. Daniel.

IMMIGRATION to the United States from 1819 to 1855, History of. *See* **Bromwell**, William J.

Imperial cyclopædia of machinery. *See* **Johnson**, William.

——— journal (The) of art, science, mechanics, and engineering. 3 v. 4°. *Manchester, n. d.*

Imperial journal—Continued.

IMPLEMENTS, gun, Dimensions and weights of. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— of chemical industry. Apparate der chemischen Grossindustrie. Von Johann Stingl. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

IMPORTS. Exports and imports as showing the advancement of every nation. *See* **Baker**, J. L.

Imray, John. Mechanical philosophy. *See* **Mitchell**, Walter, **Young**, J. R., and **Imray**, John. **Orr's circle of the sciences, v. 9.**

Imray, Keith. A popular cyclopedia of modern, domestic medicine; comprising recent improvements in medical knowledge, with a plain account of the medicines in common use. 1st American ed. roy. 8°. *New York*, 1849.

In memoriam, Samuel S. Fisher. 8°. *Cincinnati*, 1874.

Inama-Sternegg, C. Thdr. Geschichte der Preise. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Inaugural-Dissertationen zur Erlangung der Doctorwürde der hochlöblichen philosophischen Facultät zu Leipzig. 8 pamphlets. 12°. *Leipzig*, 1868–72.

INCLINATIONS, Restitution of the treatise of Apollonius Pergæus on. *See* **Burrow**, R.

INCRUSTATION of boilers. Die Kesselsteinbildung und die Mittel zur Verhütung derselben. *See* **Roth**, Ludwig.

Index (An) to current literature: comprising a reference to author and subject of every book in the English language; and to articles in literature, science and art, in serial publications, 1859, 1860, 1861. 8°. *London*, 1862.

INDIA. Analecta botanica Indica. *See* **Miquel**, F. A. W.

——— Ancient and modern. *See* **Allen**, David O.

——— The arts and manufactures of India. By J. F. Royle. *See* **Lectures** on the results of the exhibition.

——— British. Papers respecting the culture and manufacture of sugar in British India; also, notes of the cultivation of sugar in other parts of Asia, with miscel-

Digitized by Google

INDIA British—Continued.
laneous information respecting sugar. fol. *London*, 1822.
——— The fibrous plants of. *See* **Royle**, J. Forbes.
——— Notice of the East India company's tea plantations in the Himalaya mountains. *See* **Fortune**, R. **Tea** countries of China.
——— Productive resources of. *See* **Royle**, J. F.
——— Tijdschrift voor Indische taal-, land- en volkenkunde. *See* BATAVIA.
——— Trigonometrical survey of. *See* **Walker**, J. T.
INDIA-RUBBER, caoutchouc and gutta percha: including air, fire and water proofing. **Abridgments English Patents, No. 16.**
——— ——— History of. *See* **Richardson**, W. H., *jr.* **Boot** and shoe manufacturer's assistant.
——— ——— Solution and reproduction of. *See* **Luedersdorff**, F.
——— ——— wares. Kautschukwaaren. Von Isidor Schnek. *See* VIENNA. **Gen.-Dir. der Weltausst. Bericht. Gruppe 6.**
INDIAN archipelago. *See* **Rawson**, James.
——— corn: its value, culture and uses. *See* **Enfield**, Edward.
——— department of the international exhibition of 1862. *See* LONDON. **Exhibition**, 1862.
——— meal book, The. *See* **Leslie**, E.
——— plants and products. *See* **Watson**, J. Forbes.
INDIANA. Annual report of the auditor of the state for the fiscal year ending Oct. 31, 1855. 8°. *Indianapolis*, 1855.
INDIANS. Catalogues of portraits. By J. M. Stanley. **Smiths'n misc. coll., v. 2.**
——— Ethnography and philology of the Hidatsa Indians. By W. Matthews. UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. Misc. pubs., No. 7.**
——— History, condition and prospects of the Indian tribes of the United States. *See* **Schoolcraft**, Henry R.
——— Indian tribes of western Washington and northwestern Oregon. By George Gibbs. UNITED STATES. **Interior dept. Geolog. survey. J. W. Powell.**
——— Treaties between the United States and the Indian tribes. *See* UNITED STATES. **State** department.
INDIANS. Tribes of the extreme northwest. By W. H. Dall. UNITED STATES. **Interior dept. Geolog. survey. J. W. Powell.**
INDICATIONS of the Creator. *See* **Taylor**, George.
INDICATOR. By J. Glynn. *See* **Tredgold**, T. **Steam** engine, series 1.
——— and dynamometer applied to the steam engine. *See* **Main**, T. J., and **Brown**, T.
——— and the steam engine. *See* Hopkinson, J., and co.
——— Der Indicator. *See* **Völckers**, J.
——— Steam engine. *See* **Stillman**, P.
INDIGO. Art de l'indigotier. Par Beauvais-Raseau. PARIS. **Acad. des sc., arts et métiers, v. 40 and 8.**
——— Ausstellung der Waidindigküpe. *See* **Scherf**, C. F. **120 Neuer Schauplatz der Künste.**
——— Die Indigofabrication. *See* **Perrottet**, G. S. **17 Neuer Schauplatz der Künste.**
INDUCTION coil, American claim to the. *See* **Page**, Charles G.
——— ——— Inductorium; or. *See* **Noad**, H. M.
INDUCTIVE sciences, Philosophy of the. *See* **Whewell**, W.
INDUSTRIAL arts. Allgemeine illustrirte Industrie-Kunst-Zeitung. *See* **Allgemeine.**
——— ——— Chefs-d'œuvre of the. *See* **Burty**, Philippe.
——— ——— Essai sur l'art industriel. *See* **Laboulaye**, C.
——— ——— Historical sketches. *See* **Maskell**, William. **South Kensington art and science hand-books, No. 8.**
——— ——— Die Kunstindustrie auf der Wiener Weltausstellung 1873. *See* **Falke**, Jacob.
——— education, Necessity of. By L. Playfair. *See* **Lectures** on the results of the exhibition.
——— engineering. Art de l'ingénieur. *See* **Génie** (Le) industriel.
——— exhibitions. *See* **Exhibitions**, Industrial; *also*, LONDON, PARIS, NEW YORK, VIENNA, etc.
——— instruction. Gewerbl. Unterrichtswesen. Von Armand v. Dumreicher. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Digitized by Google

Industrie- und Gewerbe-Blatt. Hrsg. vom Steiermärkischen Industrie- und Gewerbeverein. Jahrg. 1-3. [In 1 v.] 4°. *Grätz*, 1856-58.

INDUSTRIES. Abhandlungen der k. technischen Deputation für Gewerbe. *See* **Abhandlungen.**

—— Annales de l'industrie nationale et étrangère. *See* **Le Normand,** L. S., and **Moléon,** J. G. V. de.

—— Annales d'industrie. *See* LYONS.

—— L'année scientifique et industrielle. *See* **Figuier,** Louis.

—— Applications nouvelles de la science, à l'industrie et aux arts. *See* **Figuier,** Louis.

—— Bulletin de la Société d'encouragement pour l'industrie nationale. *See* PARIS. **Société** (La) d'encouragement, etc.

—— Bulletin de la Société industrielle de Mulhouse. *See* MULHOUSE.

—— The curiosities of industry and the applied sciences. *See* **Dodd,** G.

—— Dictionnaire de l'industrie. *See* **Courtin,** E. M. P. M. A.

—— domestic, Transactions of the Rhode Island society for the encouragement of. *See* RHODE ISLAND.

—— Gewerbeblatt für das Grossherzogthum Hessen. *See* HESSE DARMSTADT. **Landesgewerbverein.** [†]

—— L'industrie belge en 1860—Situation des principales branches de. *See* **Kindt,** Jules.

—— L'industrie moderne. *See* **Verdeil,** F.

—— L'industrie, ou les arts. *See* **Chaussard,** M.

—— Journal für Industrie, Handel und Schifffahrt. *See* **Allgemeines.**

—— Recueil industriel. *See* **Moléon,** J. G. V. de.

—— Verhandlungen des Vereins zur Beförderung des Gewerbfleisses in Preussen. *See* BERLIN.

—— Zeitschrift des Gewerbewesens. *See* **Encyclopädische.**

Industry (The) of nations, as exemplified in the great exhibition of 1851. The materials of industry. 8°. *London*, 1852.

INFANCY and childhood, Diseases of. *See* **Smith,** J. Lewis.

—— Maternal management of. *See* **Getchell,** F. H.

INFANTRY. Armement rayé de l'infanterie européenne en 1858. *See* **Gaugler de Gempen.**

—— arms. La fabrication et l'emploi des armes et des munitions de l'infanterie. *See* **Masquelez.**

—— Mémoire sur les armes à feu rayées de l'infanterie et observations sur l'instruction, etc. *See* **Thiroux.**

INFECTION from the soil. Infection des Bodens und Bodenwassers. *See* **Goppelsröder,** F.

INFLUENCE of the mechanic arts on the human race. *See* **Gayarré,** Charles.

INFRINGEMENTS, Law of. Traité de la contrefaçon en tous genres. *See* **Blanc,** E.

INFUSORIA, A history of. *See* **Pritchard,** Andrew.

Ingenieur (Der). Zeitschrift für das gesammte Ingenieurwesen. B. 1-2. 4°. *Freiberg*, 1848-50. *See, also,* **Civilingenieur.**

—— Kalender. *See* **Stühlen,** P.

Ingersoll, Charles A. U. S. circuit court for the district of Connecticut. Henry A. Burr et al. vs. George E. Cowperthwaite. Opinion. Charles A. Ingersoll and S. Nelson, judges. 8°. *New York*, 1858. pp. 11.

Ingersoll, Charles J. Opinion. Kidd vs. Spence et al. *See* **Kidd,** W. E.

Ingraham, Edward D. Law of evidence; notes by. *See* **Starkie,** T.

INHALATION in the treatment of diseases. *See* **Da Costa,** J. M.

—— Medical. *See* **Coxe,** Edward Jenner.

—— Medicated. *See* **Dillenback,** H. P.

INJECTIONS in various diseases. *See* **Mattson,** M.

INK, Preparation of printing. *See* **Savage,** M.

INNATE ideas of memory and instinct. *See* **Perthes,** Boucher de.

INSANE, Hospital for the. *See* **Kirkbride,** Thomas S.

—— Pennsylvania hospitals for the, Reports of. *See* PENNSYLVANIA.

—— Pennsylvania hospitals for the, Rules and regulations of. *See* PENNSYLVANIA.

INSECT world, The. *See* **Figuier,** Louis.

INSECTIVOROUS plants. *See* **Darwin,** Charles.

INSECTS. *See, also,* **Entomology.**

—— Die Bankunst der Insekten. *See* **Rennie,** James.

—— Curious facts in the history of. *See* **Cowan,** Frank.

Digitized by Google

INSECTS. Farm insects of Great Britain and Ireland. *See* **Curtis,** J.

——— Modern classification of. *See* **Westwood,** J. O.

——— of New England injurious to vegetation. *See* **Harris,** T. W.

——— of New York state, Report on. *See* **Fitch,** Asa.

——— Die unseren Kulturpflanzen schädlichen Insekten. *See* **Künstler,** Gustav.

INSTINCT and reason. *See* **Samuelson,** J. The honey bee.

——— Dialogues on. *See* **Brougham,** Henry.

Institut de France. *See* PARIS.

Institution of civil engineers. *See* LONDON.

——— of engineers in Scotland. Transactions. v. 1–5. First session, 1857–58. 5th session, 1861–62. 8°. *Glasgow*, 1858–62.

——— of mechanical engineers. Proceedings. *See* BIRMINGHAM.

INSTRUCTION, Divisional course of. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— for use and care of Gatling guns. By J. D. Marvin. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— public, in California, 1st biennial report of the superintendent of. *See* CALIFORNIA.

——— théorique et pratique sur les brevets d'invention de perfectionnement et d'importation. 8°. *Paris*, 1829. Index, pp. 13.

INSTRUMENTS. A box of instruments and the slide rule, Treatise on. *See* **Kentish,** T.

——— Catalogue of chemical and philosophical. *See* Luhme, J. F., and co.

——— Catalogue des instruments d'optique, de physique, etc. *See* Lerebours and Secretan.

——— Catalogue of scientific. *See* Luhme, J. F., and co.

——— d'agriculture à l'exposition universelle de Londres. Par un conducteur belge. 12°. *Bruxelles*, 1852.

——— of precision, Report on. By C. F. Carpenter. UNITED STATES. **State dept. reports Vienna exp. 1873. v. 2.**

——— of precision, Report on. By R. D. Cutts. *See* UNITED STATES. **State dept. reports Vienna exp. 1873. v. 2.**

——— Optical, mathematical, philosophical, etc. **Abridgments English Patents, No. 76.**

——— used in American engineering and surveying. *See* **Gurley,** W. and L. E.

INSULATION, Suggestions in regard to. *See* **Turnbull,** L. **Electro-magnetic telegraph.**

Insurance guide: containing a series of calculations—showing, on inspection, the rate per cent., etc.: to which are added concise tables of discount. 8°. *London*, 1811.

——— Law of. *See* **Phillips,** Willard.

INTEGRAL calculus. Leçons de calcul intégral. *See* **Garnier,** J. G.

Intellectual (The) observer. Review of natural history, microscopic research, and recreative science. v. 1–12, 1827–68. 8°. *London*, 1827–68. [Continued as the "Student and intellectual observer" from 1869–71.]

——— philosophy, The elements of. *See* **Alden,** Joseph.

——— philosophy, A system of. *See* **Mahan,** Asa.

——— powers of man, Essays on. *See* **Reid,** Thomas.

INTENSITY coils. How made and how used. *See* **"Dyer."**

INTEREST and average tables. *See* **Delisser,** R. L.

——— tables. *See* **Torrey,** John W.

——— tables at 7%. *See* **Oates,** George.

INTERFERENCE case between Hagan and Groom for improvement in stoves. *See* **Keller,** C. M.

——— case between Palmer and Nugent: application for fire-arms: argument. *See* **How,** T. P.

INTERMENT in towns, Report on. *See* **Chadwick,** Edwin.

INTERNAL revenue law, A compendium of. *See* **Davidge** and **Kimball.**

——— revenue. Manual of the direct and excise tax system of the United States. *See* **Boutwell,** George S.

——— revenue system of 1865. *See* UNITED STATES. **Treasury dept.**

INTERNATIONAL law. Code international; ou la propriété industrielle, artistique et littéraire. *See* **Pataille,** J., and **Huguet,** A.

——— law, Elements of. *See* **Halleck,** H. W.

Digitized by Google

International scientific series. 12°. *New York*, 1872-76——.

CONTENTS.

v. 1. Forms of water, in clouds, rain, rivers, ice and glaciers. By John Tyndall.
2. Physics and politics, or thoughts on the application of the principles of natural selection and inheritance to political society. By Walter Bagehot.
3. Foods. By Edward Smith.
4. Mind and body; the theories of their relations. By Alexander Bain.
5. The study of sociology. By Herbert Spencer.
6. The new chemistry. By Josiah P. Cooke.
7. The conservation of energy. By Balfour Stewart.
8. Animal locomotion; or walking, swimming and flying: with a dissertation on aeronautics. By J. B. Pettigrew.
9. Responsibility in mental disease. By H. Maudsley.
10. The science of law. By Sheldon Amos.
11. Animal mechanism. By E. J. Marey.
12. History of the conflict between religion and science. By John W. Draper.
13. The doctrine of descent and Darwinism. By Oscar Schmidt.
14. The chemistry of light and photography, in its application to art, science and industry. By Hermann Vogel.
15. Fungi: their nature, influence and uses. By M. C. Cooke.
16. The life and growth of language. By W. D. Whitney.
17. Money, and the mechanism of exchange. By W. Stanley Jevons.
18. The nature of light; with a general account of physical optics. By Eugene Lommel.
19. Animal parasites and messmates. By Van Beneden.
20. On fermentations. By P. Schützenberger.
21. The five senses of man. By Julius Bernstein.
22. The theory of sound in its relations to music. By Pietro Blaserna.

INTEROCEANIC canals and railroads, between the Atlantic and Pacific oceans. By Charles H. Davis. *See* UNITED STATES. **Navy dept.**

INTERPRETATION, Elements of. *See* **Ernesti**, Johann August.

INTRENCHMENTS, A treatise on. *See* **Lippitt**, Francis J.

Introduction to geometry and the science of form; prepared from Prussian text-books. 12°. *Boston*, 1865.

INUNDATIONS. Études relatives aux inondations et à l'endiguement des rivières. *See* **Dausse.**

Invention (L'). Journal de la propriété industrielle, littéraire, artistique et commerciale, publié par M. Gardissal. T. 7-16, 1852-61. T. 18-20, 1863-65. 13 v. 8°. *Paris et Londres*, 1852-65.

INVENTIONS. *See, also,* **Patents.**

—— Amendment of the law and practice of letters patent for. *See* **Webster**, T.

—— Archives des inventions nouvelles, 1808-1839. *See* **Archives.**

—— Brevets des. *See* FRANCE, BELGIUM; *also,* **Patents.**

—— The century of. *See* **Somerset**, E.

—— Code de la propriété industrielle. *See* **Blanc**, E., and **Beaume**, A.

—— Curiosités des inventions. *See* **Curiosités.**

—— designs and art manufactures, Illustrated recorder of. *See* **Expositor.**

—— Dictionnaire abrégé des inventions. *See* **Peigné**, A.

—— Les grandes inventions, anciennes et modernes. *See* **Figuier**, Louis.

—— Great inventors; the sources of their usefulness. *See* **Great** inventors.

—— Histoire des découvertes scientifiques modernes. *See* **Figuier**, Louis.

—— Historical account of. *See* **Williams**, J. F. S.

—— A history of. *See* **Beckmann**, J.

—— A history of. *See* **White**, F. S.

—— History of wonderful. *See* **History.**

—— Inventor's and patentee's guide. *See* **Reigart**, J. Franklin.

—— Inventor's guide. *See* **Moore**, J. G.

—— Inventor's guide. *See* **Phillips**, W.

—— Inventor's manual. *See* **Dawson**, J. T., and **Dempsey**, G. D.

—— Inventor's manual of legal principles. *See* **Curtis**, G. Ticknor.

—— Law and practice of letters patent for. *See* **Webster**, T.

—— Machines et inventions approuvées par l'Académie royale. *See* PARIS. **Acad. royale.**

—— Manuel des inventeurs. *See* **Perpigna**, A.

—— A new century of. *See* **White**, J.

—— Ninth exhibition of. *See* LONDON. **Society** for the encouragement of arts, etc.

—— Nouveau dictionnaire des. *See* **Noel**, F. J., and **Carpentier**, L. J. M.

—— Les nouvelles inventions aux expositions universelles. *See* **Jobard**, J. B. A. M.

Digitized by Google

INVENTIONS. Novelties and curiosities in arts and manufactures. *See* **Novelties.**

——— Portfolio of origins and. *See* **Pulleyn,** W.

——— Property in. *See* **Webster,** T.

——— Railway magazine containing notices of. *See* **Herapath,** J.

——— Stories of inventors and discoverers. *See* **Timbs,** J.

——— Subject-matter of letters-patent for (English). *See* **Webster,** T.

——— The Temple anecdotes. *See* **Temple,** R. and C.

Inventor (The). v. 1, 2. *New York*, 1855–57.

Inventor's advocate and patentee's recorder. A British and foreign miscellany of inventions, discoveries and the fine arts. v. 1–5. 4°. *London*, 1839–41.

INVENTORS. *See, also,* **Inventions.**

——— Great. The sources of their usefulness. *See* **Great** inventors.

INVERTEBRATA, Anatomy of. *See* **Siebold,** C. Th. v.

——— Synopsis of the marine invertebrata of Grand Menan. **Smiths'n contrib., v. 6.**

IRELAND, Farm insects of. *See* **Curtis,** J.

——— History of. *See* **Moore,** T. **Lardner's cabinet cyclopædia, v. 15–18.**

——— Railways of. *See* **Whishaw,** F.

——— Resources and manufacturing industry of. *See* **Sproule,** J., and others.

IRISH-English dictionary, An. *See* **O'Reilley,** Edward.

IRON. Adhesion of iron spikes in timber. *See* **Johnson,** W. R.

——— Analysis of iron and iron ores. *See* **Campin,** F.

——— and heat. *See* **Armour,** James.

——— and steel, Art of increasing the strength of wrought. *See* **Johnson,** W. R.

——— and steel. Festigkeits-Eigenschaften von Eisen und Stahl. *See* **Styffe,** Knut.

——— and steel, The manufacture of. **Abridgments English Patents, No. 6.**

——— and steel. Metallurgie du fer et de l'acier. *See* **Jordan,** S.

——— and steel, The metallurgy of. *See* **Osborn,** H. S.

——— and steel, Papers on. *See* **Mushet,** D.

——— and steel, Puddling of. *See* **Urbin,** Edward.

——— and steel, Report on. By W. P. Blake. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 4.**

——— and steel, Report on the production of. By A. S. Hewitt. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v 2.**

——— and steel, Strength and determination of structures of. *See* **Weyrauch,** Philip Jacob J.

——— Anweisung für Blecharbeiter, etc. *See* **Leonhard,** August.

——— Application of, to building purposes. *See* **Fairbairn,** W.

——— architecture, Illustrations of, made by the architectural works of the city of New York. *See* **Illustrations.** [†]

——— Art d'adoucir le fer fondu. Par R. A. F. de Réaumur. PARIS. **Acad. roy. des. sc., arts et métiers, v. 8 and 15.**

——— Art de traiter les minérais de fer. *See* **Hassenfratz,** J. H.

——— L'art de tremper les fers. *See* **Cannus,** M.

——— as a material for ship building. *See* **Grantham,** J.

——— assaying. Eisenprobirkunst. *See* **Kerl,** Bruno.

——— bridge across the Mississippi river. *See* **Clarke,** Thomas Curtis.

——— bridge railings, etc. *See* Sellers brothers.

——— bridges. Album of designs for iron railway bridges. *See* Clarke, Reeves and co.

——— Bridges and girders of cast and wrought iron. *See* **Humber,** William.

——— bridges, girders and roofs. *See* **Campin,** Francis.

——— Bridges. Sammlung eisener Brückenconstructionen. *See* **Klein,** Ludwig v.

——— ——— Sammlung von Zeichnungen eisener Brücken. *See* **Sammlung** von Zeichnungen.

——— ——— A treatise on. *See* **Humber,** William.

——— casting. Handbuch des Eisengiesserei-betriebes. *See* **Dürre,** E. F.

——— construction. Eisen-Konstruktionen. *See* **Brandt,** E.

——— ——— Hochbau-Constructionen in Eisen, etc. *See* **Klasen,** Ludwig.

——— Darstellung der Stabeisenbereitung in Frischherden. *See* **Tunner,** P.

——— defences. Postscript on. *See* **Douglas,** *Sir* H.

——— Designs for iron work, 15th and 16th centuries. *See* **Pugin,** A. W.

——— Das Eisen auf der Wiener Weltausstellung, 1873. *See* **Kerpely,** Anton.

Digitized by Google

IRON. Experiments on the strength of iron wires and iron bars. *See* **Drewry,** C. S.

——— Experiments on two varieties of iron, manufactured from magnetic ores. *See* **Johnson,** W. R.

——— Fabrication de la fonte et du fer. *See* **Flachat,** E., **Barrault,** A., and **Petiet,** J.

——— forging. Eisenhüttenwesen in Schweden. *See* **Tunner,** P.

——— Fortschritte des Eisenhüttengewerbes. *See* **Hartmann,** C. F. A.

——— founder's guide. *See* **Larkin,** J.

——— founding. Eisenhüttenkunde. *See* **Kerl,** Bruno.

——— Galvanized iron and its application to building and other purposes. *See* **Demarteau,** Amédée.

——— Grundriss der Eisenhüttenkunde. *See* **Wedding,** Hermann.

——— Handbuch der Eisenhüttengewerbskunde. *See* **Hartmann,** Carl.

——— Industrial biography, iron workers, etc. *See* **Smiles,** Samuel.

——— industry. Reiseskizzen aus den Vereinigten Staaten, mit besonderer Berücksichtigung der Eisenindustrie. *See* **Macco,** Heinrich, and **Jasper,** O.

——— its history, properties, and process of manufacture. *See* **Fairbairn,** William.

——— Key to the manufactories of Sheffield. *See* **Smith,** J.

——— Malleable iron in the construction of jettees and breakwaters. **Weale's papers on engineering, v. 1.**

——— Manuel du maître de forges. *See* **Landrin,** M. H. **38 Manuels Roret.**

——— manufacture. Eisenindustrie Böhmens. *See* **Balling,** Carl A. M.

——— Manufacture of. *See* **Overman,** F.

——— manufacture of Great Britain. *See* **Truran,** W.

——— Manufacture of, in Great Britain. *See* **Wilkie,** G.

——— Manufacturer's guide to the furnaces, forges and rolling mills of the United States. *See* **Lesley,** J. P.

——— Métallurgie du fer. *See* **Saint-Ange,** W. de.

——— metallurgy. Handbuch der Eisenhüttenkunde. *See* **Percy,** John.

——— Metallurgy of. *See* **Bauerman,** H.

——— piers for deep water. *See* **Dickson,** S. K.

——— Recueil de fers spéciaux, des expériences faites sur leur résistance. *See* **Zores,** C. F.

IRON, Relative strength of common cast and toughened cast. *See* **Owen,** J.

——— Report on the fabrication of, for defensive purposes. *See* UNITED STATES. **War** dept.

——— rolling. Formen der Walzkunst und das Façoneisen; seine Geschichte, Benutzung und Fabrikation. *See* **Mäurer,** Eduard.

——— ——— Ueber die Walzenkaliberirung für die Eisenfabrikation. *See* **Tunner,** P.

——— ship-building. *See* **Grantham,** John. **Weale's series, No. 54*.**

——— smelting, Chemical phenomena of. *See* **Bell,** T. Lowthian.

——— Die Stabeisenbereitung. *See* **Tunner,** P.

——— Strength and other properties of cast. *See* **Hodgkinson,** E.

——— Strength of cast. *See* **Tredgold,** T.

——— Strength of cast and malleable. *See* **Barlow,** P.

——— Table of the weight of. *See* **Richardson,** John.

——— Tables and information appertaining to the use of wrought. *See* **Haumann,** A. G.

———; the journal of science, metals, and manufactures. A new series of the Mechanics' magazine. v. 1–10, 1873–77. roy. fol. *London,* 1873–77———.

——— trade, History of the. *See* **Scrivenor,** H.

——— ——— The iron trader's guide. *See* **Hogg,** J.

——— ——— The merchant and mechanic's complete text-book to the. *See* **Merchant's.**

——— ——— Rise and progress of the iron trade of the United States, 1621–1857. *See* **French,** B. F.

——— Traité de la fabrication du fer. *See* **Valerius,** B.

——— Traité théorique et pratique de la métallurgie du fer. *See* **Jullien,** C. E.

——— Treatise on iron metallurgy. *See* **Rogers,** S. B.

——— works. Arts des forges et fourneaux à fer. Par le marquis Gasp. Le Compasseur de Créqui-Montfort de Courtivron, et E. J. Boucher. PARIS. **Acad. roy. des sc., arts et métiers, v. 6 and 2.**

IRRADIATION. Ueber Irradiation. *See* **Welcker,** H.

IRRIGATION in southern Europe. *See* **Monorieff,** C. C. Scott.

Digitized by Google

Irving, C. A catechism of practical chemistry: being a familiar introduction to that interesting science; with an appendix, containing many safe, easy experiments. 5th ed. rev. by John Griscom. *Illus.* 18°. *New York,* 1837. **Irving's catechisms, part 3.**

Isherwood, Benjamin F. Description of timber bridges on the Utica and Syracuse railroad. *See* **Weale,** J. **Theory** of bridges, v. 2.

—— Engineering precedents for steam machinery; embracing the performances of steam ships, experiments with propelling instruments, condensers, boilers; accompanied by analysis of the same. 2 v. 8°. *New York,* 1859.

—— Experimental researches in steam engineering. 2 v. 4°. *Philadelphia,* 1863–65.

Issartier, Henri. Culture des arbres fruitiers. 24°. *Paris,* 1861. **Librairie classique, v. 1.**

ISTHMUS of Suez. Percement de l'isthme de Suez. *See* **Lesseps,** Ferdinand de.

ITALIAN art, Wonders of. *See* **Illustrated library of wonders, v. 5.**

—— English dictionary. *See* **Baretti,** J.

—— language, A key to the exercises in. *See* **Ollendorff,** H. G.

—— —— A new method of learning the. *See* **Ahn,** F.

—— —— Ollendorff's new method of learning the. *See* **Foresti,** Felix.

—— Primary lessons in. *See* **Greene,** G.W.

ITALY. Codice penale pel regno d'Italia. 24°. *Milano,* 1866.

—— Direzione della strade ferrate. Traforo delle Alpi, tra Bardonnèche e Modane. Relazione della direzione technica alla direzione generale delle strade ferrate dello stato. fol. *Torino,* 1863.

—— History of the Italian republics. *See* **Simonde de Sismondi,** J. C. L. **Lardner's cabinet cyclopædia, v. 47.**

—— The Italian court in the Crystal palace. *See* **Wyatt,** M. D., and **Waring,** J. B. **Crystal palace library, v. 2.**

—— Italie économique, en 1867; avec un aperçu des industries italiennes, à l'exposition universelle de Paris. 8°. *Florence,* 1867.

—— Lives of literary and scientific men of. *See* **Shelley,** M. W., and others. **Lardner's cabinet cyclopædia, v. 88–90.**

ITALY. Ministero d'agricoltura, industrial e commercio. Bolletino industriale del regno d'Italia. Tomo 1–3. [Tomo 1, 3, tav., fol.] 1864–66. 2a serie. Tomo 1, 1870. Gennaio—Settembre. 1. 4°. *Torino,* 1864–71. *See, also,* **Patents.**

—— Movimento commerciale del regno d'Italia, 1866. roy. 4°. *Milano,* 1868.

—— The petroleum zones of. *See* **Fairman,** E. St. John.

—— Reale comitato dell'esposizione internazionale del 1862. Tomo 1–5. Tomo 1°. Mineralogia e metallurgia—armi ed artiglierie. Tomo 2°. Istruzione, igiene, carta, stampa e rilegatura di libri. Tomo 3°. Vino, vetri e cristalli, ceramica, lanerie, seta e tessuti di seta, cotoni, mobili ed oggetti d'addobbo, oli, grassi e cera. Tomo 4°. Mappe e carta, combustibili fossili, sali, solfo, marmi e altri prodotti litoidi, prodotti vegetali adoperati nelli arti, concimi, sostanze alimentari, l'insignamento in Inghilterra. Tomo 5°. Indice alfabetico delle materie contenute nei volumi precedenti. 8°. Tomo 1–3, *Torino,* 1864–65. Tomo 4–5, *Firenze,* 1867.

—— Statistica del regno d'Italia. Elezioni politiche e amministrative. Anni 1865–1866. fol. *Firenze,* 1867.

—— —— Industria manifattrice. Tratura della seta. Anno 1866. roy. 8°. *Firenze,* 1868. pp. 31.

—— —— Istituti di previdenza; le casse di risparmio 1864. fol. *Firenze,* 1867.

—— —— Movimento della navigazione nei porti del regno. Pesca del pesce e del corallo; marineria mercantile; costruzioni navali; infortuni marittimi. Anno 1867. 4°. *Firenze,* 1868.

—— —— Le opere pie nel 1861. fol. *Firenze,* 1868.

IVORY. Ancient and mediæval ivories. *See* **Maskell,** William. **South Kensington art and science handbooks, No. 3.**

—— Das Beizen, Schleifen und Poliren de Holzes, Elfenbeins, etc. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

J*.** Ensilage des grains, ou mémoire sur leur conservation par la privation de l'air atmosphérique et l'isolement de l'humidité. 8°. *Paris,* 1819.

Jacini, Stefano. La proprietà fondiaria e le popolazioni agricole in Lombardia. 8°. *Milano,* 1834.

Digitized by Google

Jackson, Charles T. A manual of etherization: containing directions for the employment of ether, chloroform, and other anæsthetic agents, by inhalation in surgical operations; with instructions for the preparation of ether and chloroform, and for testing them for impurities: also a history of the discovery of anæsthesia. 12°. *Boston*, 1861. [2 copies.]

Jackson, J. R. What to observe; or the traveller's remembrancer. 12°. *London*, 1841.

Jackson, John. A treatise on wood engraving, historical and practical. *Illus.* 8°. *London*, 1839.

Jackson, John P. Report of the directors of the New Jersey railroad and transportation co. to the stockholders, etc. 8°. *Newark*, 1855. pp. 15.

Jackson, W. H. Descriptive catalogue of the photographs of the geological survey of the territories. UNITED STATES. **Interior dept. Geol. Survey. F. V. Hayden.**

Jacobi, Louis, and **Grefe,** Conrad. Kupfer- und Stahlstichdruck. Lithographie und Chromographie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

Jacobs, J. A. Learning to spell, to read, to write and to compose, all at the same time. Part 1. 24°. *New York*, 1867.

Jacobs, William. An historical inquiry into the production and consumption of the precious metals. 2 v. 8°. *London*, 1831.

Jacquemart, Albert. History of the ceramic art; a study of the pottery of all ages and all nations. Translated by Mrs. Bury Palliser. 8°. *London*, 1873.

Jacques, D. H. The barn-yard; a manual of cattle, horse and sheep husbandry, etc.; with a chapter on bee keeping. 12°. *New York*, 1866.

Jaeger, B. Class book of zoology; with a list of the different species found in the state of New York. 24°. *New York*, 1849.

Jahn, C. F. A. Die Gasbeleuchtung und die Darstellung des Leuchtgases; hrsg. von. *Illus.* 8°. *Leipzig*, 1862.

Jahr, G. H. G. Alphabetical repertory of the skin symptoms and external alterations of substance. Ed. by Charles J. Hempel. 24°. *New York*, 1850.

——— The homeopathic treatment of the diseases of females, and infants at the breast. Transl. from the French by C. J. Hempel. 8°. *Philadelphia*, 1856.

——— New manual, or Symptomen codex. Transl. with additions by C. J. Hempel and J. M. Quinn. 2 v. *New York*, 1868.

——— The venereal diseases; their pathological nature, correct diagnosis and homeopathic treatment. Transl. by Charles J. Hempel. 8°. *New York*, 1868.

Jahrbuch der Erfindungen. *See* **Hirzel, H., and Gretschel, H.**

——— der königlich sächsischen Akademie für Forst- und Landwirthe zu Tharand. Hrsg. von Frhrn. v. Berg, A. Cotta, H. Krutzsch, Schober, Stein, A. Stöckhardt. Neue Folge, B. 1–8. 8°. *Leipzig*, 1852–63.

——— für den sächsischen Berg- und Hüttenmann. *See* FREIBERG.

——— über die Leistungen und Fortschritte auf dem Gebiete der practischen Baugewerbe. Redakteur, Herm. Zwick. Jahrg. 1–7, 1870–76. roy. 8°. *Leipzig*, 1870–76——.

Jahres-Bericht über die Fortschritte der physischen Wissenschaften, von Jacob Berzelius aus dem Schwedischen übersetzt von C. G. Gmelin. Jahrg. 1–29, 1822–50. [From Jahrg. 21, title changed to "der Chemie und Mineralogie".] 8°. *Tübingen*, 1822–50.

——— Same. Vollständiges Sach- und Namenregister, 1ster–25ter Jahrg. 1 B. 8°. *Tübingen*, 1847.

James, Charles. A new and enlarged military dictionary, in French and English. v. 1–2. 3d ed. 8°. *London*, 1810.

James, Charles T. American railroad journal; ed. by. *See* **American.**

James, George Payne Rainsford, and **Crowe,** E. E. Lives of the most eminent foreign statesmen. v. 1–5. 16°. *London*, 1832-38. **Lardner's cabinet cyclopædia, v. 83–87.**

James, Henry. Domesday book: Cornwall; photo-zincographed. by. *See* GREAT BRITAIN.

——— On photo-zincography; under the direction of. *See* **Scott,** A. De C.

Jameson, Anna. A handbook to the courts of modern sculpture. 8°. *London*, 1854. **Crystal palace library, v. 2.**

Digitized by Google

Jameson, Horatio Gales, *sen'r.* A treatise on epidemic cholera. 8°. *Philadelphia,* 1855.

Jameson, Robert. The Edinburgh new philosophical journal. *See* EDINBURGH.

——— Encyclopædia of geography, geology, etc., by. *See* **Murray,** Hugh.

Jamieson, Alexander. A dictionary of mechanical science, arts, manufactures, and miscellaneous knowledge. *Illus.* 6th ed. 4°. *London,* 1828.

——— A manual of map-making, and mechanical geography. 4th ed. 18°. *London,* 1866.

——— Mechanics of fluids for practical men, comprising hydrostatics, descriptive and constructive. *Illus.* 8°. *London,* 1837.

——— Mechanics for practical men. Treatise on the composition and resolution of forces; the center of gravity, and the mechanical powers. 4th ed. *Illus.* 8°. *London,* 1845.

Jamieson, John. Dictionary of the Scottish language, in which the words are explained in their different senses; abridged by John Johnston. A new ed. rev. by John Longmuir. 8°. *Edinburgh,* 1867.

Jamin, M. J. Cours de physique de l'École polytechnique. 3e éd. T. 1-3. 8°. *Paris,* 1868-70.

——— Petit traité de physique. 8°. *Paris,* 1870.

Janvier, —. Ueber die zweckmässigste Construction und Einrichtung der Dampfschiffe und der auf denselben anwendbaren Dampfmaschinen. Frei übertragen von C. H. Schmidt. 2te Aufl. *Illus.* 8°. *Weimar,* 1842. **98 Neuer Schauplatz der Künste.**

——— and **Biston,** Valentine. Der Brunnen-, Röhren-, Pumpen- und Spritzenmeister, auch Bleiarbeiter. Nach dem Französischen des Janvier und Biston frei bearbeitet von J. G. Petri. Zweite verbesserte und mit der Construction metallener Säuge-Pumpen, und vielen andern Zusätzen vermehrte Auflage, hrsg. von Carl Alfing. *Illus.* 8°. *Weimar,* 1841. **45 Neuer Schauplatz der Künste.**

——— ——— Manuel du mécanicien fontainier, pompier, plombier. 2e éd. *Illus.* 18°. *Paris,* 1835. **93 Manuels Roret.**

JAPAN. Nippon.—Archiv zur Beschreibung von Japan. *See* **Siebold,** Philipp Franz von.

JAPAN. Reise um die Erde nach Japan. *See* **Heine,** Wilhelm.

Japanese botany; being a fac simile of a Japanese book, with introductory notes and translations. 4°. *Philadelphia, n. d.*

——— Manners and customs of the. *See* **Manners,** etc.

——— One thousand phrases in English, and Romanized Japanese. *See* **Liggins,** John.

JAPANNING, Book of. *See* **Lady's** library.

Jardine, Alexander. Geometry. *See* **Young,** J. R. **Orr's circle of the sciences, v. 8.**

Jarrin, W. A. The Italian confectioner; or, complete economy of desserts. New ed., rev., etc. 12°. *London,* 1861.

Jars, Gabriel. Art de fabriquer la brique et la tuile en Hollande. PARIS. **Acad. roy. des sc., arts et métiers, v. 14.**

Jarvis, Edward. Physiology and laws of health. 12°. *New York,* 1866.

Jasper, O. Reiseskizzen aus den Vereinigten Staaten. *See* **Macco,** Heinrich, and **Jasper,** O.

Jaunez, —. Guide du chauffeur. *See* **Grouvelle.**

——— Handbuch der Dampfmaschinen. *See* **Grouvelle, Jaunez,** and **Jullien,** C. E. **158, 159 Neuer Schauplatz der Künste.**

JAVA en Madura. Statistiek van den Handel en de Scheepvaart op Java en Madura sedert 1825. Uit officieele bronnen bijeenverzameld door G. F. De Bruijn Kops. Deel 1, 2. 8°. *Batavia,* 1857-58.

JAWS, On the diseases of the. *See* **Koecker,** Leonard.

Jeaffreson, J. Cordy, and **Pole,** William. The life of Robert Stephenson. 2 v. 8°. *London,* 1864.

Jeans, H. W. Navigation and nautical astronomy; with numerous examples. 12°. *London,* 1853. **Weale's series, Nos. 99, 100.**

Jebb, C. B. Report on the discipline and construction of Portland prison, and its connection with the system of convict discipline now in operation. 8°. *London,* 1850.

Jeep, W. Der Bau der Pumpen und Spritzen. 8°. *Leipzig,* 1871.

Jeffers, William N., *jr.* A concise treatise on the theory and practice of naval gunnery. 8°. *New York,* 1850.

Digitized by Google

Jeffers, William N., *jr.* Nautical routine and stowage. *See* **Murphy,** J. McL.

Jeffries, David. A treatise on diamonds and pearls: plain rules for ascertaining the value of both: also the true method of manufacturing diamonds. 4th ed. 8°. *London, n. d.*

Jencken, Johann Ferdinand. Treatises on light, colour, electricity and magnetism. Transl. and prefaced by historical and critical essays, by Henry D. Jencken. 8°. *London,* 1869.

Jenken, W. Koninklijke fabriek van landbouw-werktuigen. 8°. *Zwolle,* 1858. pp. 47.

Jenkin, Fleeming. Electricity and magnetism. 12°. *New York,* 1873.

Jenkins, Jabez. Vest-pocket lexicon. An English dictionary of all except familiar words; including the principal scientific and technical terms, and foreign moneys, weights and measures; omitting what everybody knows, and containing what everybody wants to know and cannot readily find. 32°. *Philadelphia,* 1865.

Jenkins, John S. The new clerk's assistant, or book of practical forms. To which is added the new constitution of the state of New York. 4th ed. 8°. *Auburn,* 1850.

Jenks, Robert W. The brachial telegraph; an original method of conversing and signalizing on land and at sea, by means of the human arms. 8°. *New York,* 1852.

Jennings, Cyrus. Report upon the preliminary survey of the Illinois southern rail-road. 8°. *St. Louis, Mo.,* 1857. pp. 32.

Jennings, I. The philosophy of human life, with especial design to develop the true idea of disease. 12°. *Cleveland, O.,* 1852.

Jennings, Robert. The horse and other live stock, with the diseases to which they are respectively subject, and the appropriate remedies for each. 8°. *Philadelphia,* 1866.

—— Horse training made easy: a new system of teaching and educating the horse. Whip training, or how to drive without reins. How to make a horse trot honest, etc. 12°. *Philadelphia,* 1866.

Jennings, Samuel K. A plain elementary explanation of the nature and cure of disease, etc.; the patent, portable warm and hot bath. 12°. *Washington,* 1814.

JERICHO, Going to. *See* **Swift,** J. T.

JERUSALEM. The city of the Great King, as it was, as it is, and as it is to be. *See* **Barclay,** J. P.

—— The new. *See* **Swedenborg,** Emanuel.

Jervis, John B. Railway property; a treatise on the construction and management of railways. 12°. *New York,* 1861.

Jervis-White-Jervis, H. Our engines of war, and how we got to make them. 8°. *London,* 1859.

—— The rifle-musket. 2d ed. 8°. *London,* 1859.

Jessop, William, Memoir of; by S. Hughes. **Weale's papers on engineering, v. 1.**

Jevons, W. Stanley. Coal; its value and importance in the arts and sciences. **Science lectures for the people, series 1.**

—— The principles of science; a treatise on logic and the scientific method. 8°. *New York,* 1874.

JEWELRY. Handbuch der Edelsteinkunde. *See* **Kluge,** Karl Emil.

—— Handbuch für Juweliere. *See* **Bürck,** A. **63 Neuer Schauplatz der Künste.**

—— Kunst des Goldarbeiters, Silberarbeiters und Juweliers. *See* **Kulmer,** Rudolf v. **8 Neuer Schauplatz der Künste.**

—— Manuel du bijoutier. *See* **Julia de Fontenelle,** J. S. E. **36 Manuels Roret.**

—— The practical gold worker, or goldsmith and jeweller's instructor. *See* **Gee,** George E.

—— Der vollkommene Juwelier. *See* **Beumenberger,** J. G. **32 Neuer Schauplatz der Künste.**

Jewett, Charles Coffin. Catalogue of the library of Brown university. 8°. *Providence, R. I.,* 1843. [†]

—— Index to the catalogue of the public library; compiled by. *See* BOSTON. **Public library.**

—— Smithsonian report, on the construction of catalogues of libraries, and their publication by means of separate stereotype titles; with rules and examples. 8°. *Washington,* 1853.

Jewett, E. R. Illustrations of the report of the commissioner of patents; specimen copies. 9 v. 8°. *Buffalo, N. Y.,* 1865–68.

Jewitt, Llewellynn. Manual of wood carving. *See* **Bemrose,** William.

Digitized by Google

Jewitt, Llewellynn. The Wedgwoods: being a life of Josiah Wedgwood, with notices of his works and their productions. Memoirs of the Wedgwood and other families, and a history of the early potteries of Staffordshire. *Illus.* 8°. *London*, 1865.

Jewry, Mary. Warne's model, and housekeeping book, containing instruction in household management; ed. by. 8°. *London*, 1869.

JEWS, Restoration of the promised land to the. *See* **Wright,** John. Christianity and commerce.

——— Statistik des Judenthums. *See* **Schimmer,** Gustav Adolf.

Jičínský, Ferdinand. Das Saftgewinnungsverfahren der Diffusion. 8°. *Leipzig*, 1874.

——— Der Werth der Zuckerrüben analyse. Nebst Anleitung zu einer rationellen chemisch-technischen Betriebscontrole der Zuckerfabrikation. 8°. *Leipzig*, 1877. pp. 32.

Jillson, Arnold. A treatise on instrumental arithmetic: or utility of the slide rule: a pocket companion for the mechanic, manager, and operative. 24°. *Providence*, 1859.

Jillson, William Everett. Catalogue of the library of congress. Chap. 1. Compiled by. *See* UNITED STATES. **Congress.**

Jobard, Jean Baptiste A. M. Avis à la chambre des pairs de France sur le projet de loi des modèles, dessins et tissus de fabrique, etc. 12°. *Bruxelles*, 1845. pp. 43.

——— Brevets d'invention; projet de M. Boutarel. 50me et dernière brochure de M. Jobard, en faveur de la propriété intellectuelle. 16°. *Bruxelles*, 1861. pp. 24.

——— Création de la propriété intellectuelle. 8°. *Bruxelles*, 1843.

——— Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

——— Industrie française. Rapport sur l'exposition de 1839. T. 1-2. 8°. *Bruxelles*, 1841-42.

——— Machines à vapeur; rapport sur l'explosion à une houillère du Flénu. *See* BELGIUM.

——— Le monautopole ou code complémentaire d'économie sociale, réglant les droits et les devoirs de l'inventeur, du fabricant, du marchand et de l'ouvrier, présenté à la Société des inventeurs français. 12°. *Bruxelles*, 1845. [Bound with "Verdunsten oder Verdampfen".]

Jobard, J. B. A. M.—Continued.

——— Nouvelle économie sociale, ou monautopole industriel, artistique, commercial et littéraire: fondé sur la pérennité des brevets d'invention, dessins, modèles et marques de fabrique. 8°. *Paris*, 1844.

——— Les nouvelles inventions aux expositions universelles. T. 1-2. 8°. *Bruxelles et Leipzig*, 1857-58.

——— Organon de la propriété intellectuelle. 12°. *Paris*, 1851.

Jobson, David Wemyss. A treatise on the anatomy and physiology of the teeth: their diseases and treatment; with practical observations on artificial teeth, and rules for their construction. 8°. *Baltimore*, 1844. **American library of dental science, v. 6.**

Jochmann, E. Fortschritte der Physik. *See* BERLIN. **Physikalische** Gesellschaft.

Johnson, —. The home-book. *See* **Valentine,** R.

Johnson, A. B. The meaning of words, analysed into words and unverbal things; and unverbal things classified into intellections, sensations and emotions. 12°. *New York*, 1862.

——— The physiology of the senses, or how and what we see, hear, taste, feel and smell. 12°. *New York*, 1856.

Johnson, A. F. Interference between the application of Emery and Johnson and the patent granted to J. E. A. Gibbs. Argument of counsel. *See* **Pollok,** A.

Johnson, Andrew, Proceedings in the trial of. *See* UNITED STATES. **Congress.**

Johnson, Benjamin P. Great exhibition of the industry of all nations, 1851. Report of Benj. P. Johnson, agent of the state of New York. 8°. *Albany*, 1852.

Johnson, C. Pierpont. The useful plants of Great Britain: a treatise upon the native vegetables capable of application as food, medicine, or in arts and manufactures. Illustrated by John E. Sowerby. 8°. *London*, 1862.

Johnson, Cuthbert W. The farmer's encyclopædia, and dictionary of rural affairs, etc. *Illus.* 8°. *Philadelphia*, 1844. Rev. ed., 1868.

Digitized by Google

Johnson, Cuthbert W. On fertilizers. 2d ed. 8°. *London*, 1844.

Johnson, Frank G. Aids to teachers and students in natural philosophy: a key to Dr. Johnson's philosophical charts. 18°. *New York*, 1856.

—— The Nicolson pavement, and pavements generally. 8°. *New York*, 1867.

Johnson, G. H. S. Optical investigations. 8°. *Oxford*, 1835.

Johnson, George William. A dictionary of modern gardening. Ed. by David Landreth. 8°. *Philadelphia*, 1847.

—— The gardener's monthly volume; the dahlia, its culture, uses and history. September No., 1847. 24°. *London*, 1847.

Johnson, James. The influence of tropical climates on European constitutions; a treatise on the principal diseases incidental to Europeans in the East and West Indies, Mediterranean and coast of Africa. 3d ed. 8°. *London*, 1821.

—— and **Johnson,** John Henry. The patentee's manual; being a treatise on the law and practice of letters patent. 8°. *London*, 1853. 2d ed., 1858. 3d ed., 1866.

Johnson, John. Typographia, or the printers' instructor: including an account of the origin of printing, with biographical notices of the printers of England, from Caxton to the close of the 16th century: a series of ancient and modern alphabets, and domesday characters: with an elucidation of every subject connected with the art. 2 v. 8°. *London*, 1824.

Johnson, Lorenzo D. Memoria cyclopedia, or the art of memory applied to technicalities and numbers in the sciences. sm. 4°. *Taunton*, 1846.

—— Memoria technica, or the art of abbreviating those studies which give the greatest labor to the memory. 8°. *Boston*, 1847.

Johnson, Louisa. Every lady her own flower gardener; addressed to the industrious and economical only: containing simple and practical directions for cultivating plants and flowers. 16°. *New York*, 1852.

Johnson, Samuel. A dictionary of the English language: to which are prefixed a history of the language, and an English grammar. 2d ed. 2 v. fol. *London*, 1755–56.

—— Same. 8th ed. imp. 8°. 1813.

Johnson, Samuel W. How crops feed; a treatise on the atmosphere and the soil, as related to the nutrition of agricultural plants. *Illus.* 12°. *New York*, 1870.

Johnson, Walter R. Description of an apparatus called the rotascope, for exhibiting several phenomena and illustrating certain laws of rotary motion. 8°. *n. t. p.* pp. 18. [Bound in a vol. entitled "Scientific essays".]

—— The economy of heat. 8°. *n. t. p.* pp. 20. [Bound in a vol. entitled "Scientific essays".]

—— Experimental inquiries respecting heat and vapor, with some practical applications. 8°. *n. t. p.* [Bound in a vol. entitled "Scientific essays".]

—— Experiments on the explosion of steam boilers. *See* UNITED STATES. **Navy** department.

—— Experiments on the adhesion of iron spikes of various forms, when driven into different species of timber. 8°. *n. t. p.* pp. 12. [Bound in a vol. entitled "Scientific essays".]

—— Experiments on two varieties of iron, manufactured from the magnetic ores, at the Adirondack iron works, Essex county, N. Y. 8°. *n. t. p.* pp. 94–105. [Bound in a vol. entitled "Strength of materials".]

—— Methods of determining and calculating the specific heats of certain solids, etc. 8°. *n. t. p.* pp. 16. [Bound in a vol. entitled "Scientific essays".]

—— Observations on the effects of a remarkable atmospheric current or storm, as witnessed on the day following its occurrence. 8°. *n. t. p.* pp. 13. [Bound in a vol. entitled "Scientific essays".]

—— Observations on the electrical characters of caoutchouc, or gum elastic. 8°. *n. t. p.* pp. 8. [Bound in a vol. entitled "Scientific essays".]

—— Observations on the relation between rolling and dragging friction. 8°. *n. t. p.* pp. 12. [Bound in a vol. entitled "Scientific essays".]

—— Remarks on the strength of cylindrical steam boilers. Appended is a notice of an ancient American utensil. 8°. *n. t. p.* pp. 12. [Bound in a vol. entitled "Strength of materials".]

—— Report of experiments by the sub-

Digitized by Google

Johnson, Walter R.—Continued.
committee, from the committee of the Franklin institute of Pennsylvania on the explosion of steam boilers. 8°. *n. t. p.*

——— Specification of a patent for an improvement in the art of increasing the strength of wrought iron and steel. 8°. *n. t. p.* pp. 4. [Bound in a vol. entitled "Scientific essays".]

Johnson, William. The imperial cyclopædia of machinery: a series of plans, sections and elevations of stationary, marine and locomotive engines, spinning machinery, grinding mills, tools, etc. 1 v. with vol. of plates. roy. 4°. *Glasgow, Edinburgh, and London,* [1856 ?].

Johnson, William Woolsey. An elementary treatise on analytical geometry, embracing plane co-ordinate geometry and an introduction to geometry of three dimensions. 8°. *Philadelphia,* 1860.

Johnsonus, Gulielmus. Lexicon chymicum. 24°. *Londini,* 1651.

Johnston, Alexander Keith. The physical atlas, a series of maps and notes illustrating the geographical distribution of natural phenomena; based on the Physikalischer Atlas of H. Berghaus, with the co-operation of Sir D. Brewster, J. D. Forbes, E. Forbes, J. P. Nichol, A. Bone, G. R. Waterhouse, J. S. Russell, and G. Kombst. fol. *Edinburgh,* 1848.

Johnston, James F. W. Lectures on the applications of chemistry and geology to agriculture. 5th ed. 12°. *New York,* 1849.

——— Liebig's question to Mulder tested; introd. by. *See* **Mulder,** G. T.

Johnston, W. E. Report on the preparation of food. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Johnston, William. History of inventions, etc.; transl. by. *See* **Beckmann,** J.

Johonnot, James. Country school houses: containing elevations, plans, and specifications, with estimates, directions to builders, suggestions as to school grounds, furniture, apparatus, etc. *Illus.* 8°. *New York,* 1859.

Joigneaux, P. Traité des amendements et des engrais. 24°. *Paris,* 1848.

JOINERY. *See, also,* **Carpentry.**

——— Arbeiten des Bautischlers. *See* **Rössler,** H.

JOINERY. Die architektonischen Glieder für Gurten, etc. *See* **Rössler,** H.

——— Art de menuisier. Par J. A. Roubo. PARIS. **Acad. roy. des sci., arts et métiers, v. 15-19.**

——— Bautischlerei. Von Wilhelm Flattich. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 8.**

——— Guide book for. *See* **Carpentry.**

——— Guide book for. *See* **Nicholson,** P.

——— Holzverbindungen für Tischlerarbeiten. *See* **Fink,** F.

——— Moderne Bautischlerei. *See* **Hartel,** A. W. **148 Neuer Schauplatz der Künste.**

——— Muster-Sammlung für Bautischler. *See* **Krug,** E.

——— Treatise on. *See* **Robison,** J., and **Tredgold,** T. **Weale's series, No. 123.**

JOINT stock directory, The. *See* **Templeton,** George.

Jolly, Philipp. Ueber die Physik der Molecularkräfte. Rede in der öffentlichen Sitzung der königlichen Akademie der Wissenschaften. 4°. *München,* 1857. pp. 18.

Jombert, Charles Antoine. Dictionnaire portatif de l'ingénieur et de l'artilleur; nouv. éd. par. *See* **Belidor,** B. F. de.

Jones, *Captain.* Artificial fire-works, improved to the modern practice, with their ingredients, compositions, preparations, machines, moulds, etc. 2d ed. 8°. *London, n. d.*

Jones, C. Handfield, and **Sieveking,** E. H. A manual of pathological anatomy. 1st Amer. ed. rev. 8°. *Philadelphia,* 1854.

Jones, David. On the value of annuities, and reversionary payments, with numerous tables. To which is added a treatise on probability, by Sir W. Lubock and J. E. D. Bethune. 2 v. 8°. *London,* 1844.

Jones, Henry. Philosophical transactions, from 1700 to 1720; abridged by. *See* LONDON. **Royal** society.

Jones, Henry Bence. Annual report of the progress of chemistry; ed. by. *See* **Liebig,** J. v., and **Kopp,** H.

——— Chemistry of wine; ed. by. *See* **Mulder,** G. J.

Jones, J. Practical phonography, or the new art of rightly spelling and writing words by the sound thereof; and of rightly sounding and reading words by the sight thereof, applied to the English tongue. 8°. *London,* 1701.

Digitized by Google

Jones, J. Winter. List of books of reference in the reading room of the British museum; preface by. *See* LONDON. **British** museum. [†]

Jones, Joseph. North American vertebrata; by. **Smiths'n contrib., v. 8.**

Jones, Owen. The Alhambra court in the Crystal palace, erected and described by. 8°. *London,* 1854. **Crystal palace library, v. 1.**

——— An apology for the colouring of the Greek court in the Crystal palace. 8°. *London,* 1854. **Crystal palace library, v. 1.**

——— Examples of Chinese ornament, selected from objects in the South Kensington museum and other collections. *Illus.* fol. *London,* 1867.

——— The grammar of ornament: illustrated by examples from various styles of ornament. *Illus.* fol. *London,* 1856.

——— and **Bononi,** J. Description of the Egyptian court, erected in the Crystal palace. With an historical notice of the monuments of Egypt, by Samuel Sharpe. 8°. *London,* 1854. **Crystal palace library, v. 1.**

Jones, Silas. An introduction to legal science, being a concise and familiar treatise on legal topics; also dictionary of law terms and phrases. 8°. *New York,* 1842.

Jones, Thomas Wharton. On the invention of stereoscopic glasses for single pictures; and the physiology of stereoscopic vision. 8°. *London,* 1860. pp. 31.

——— The principles and practice of ophthalmic medicine and surgery. 8°. *Philadelphia,* 1856.

Jones, William. The gentlemen's or builders' companion: containing designs for doors, gateways, pavilions, temples, chimney-pieces, slab-tables, pier glasses, etc. 4°. *London,* 1739.

Jones, William. A popular sketch of the various proposed systems of atmospheric railway, demonstrating the applicability of the mechanical properties of the atmosphere, as a motive power. *Illus.* 24°. *London,* 1845.

Jones, William A. Reconnaissance of northwestern Wyoming, 1873. *See* UNITED STATES. **War** department.

Jones and Hasselman. Telegraphic cypher; to be used only in communication with Jones and Hasselman. 24°. *Davenport,* 1869. pp. 24.

Jones and Hasselman—Continued.

Jordan, August. Das Anilin, und die Anilin-Farben. 16°. *Weimar,* 1863.

Jordan, David S. Contributions to North American ichthyology. Based primarily on the collections of the United States national museum. 1. Review of Rafinesque's memoirs on North American fishes. *Washington,* 1877. *See* UNITED STATES. **Interior dept. National museum. Bulletin 9.**

Jordan, S. Métallurgie du fer et de l'acier. 8°. *Paris,* 1872.

JORDAN, Expedition to the river. *See* **Lynch,** W. F.

Jores, J. A new book of iron work, containing a great variety of designs. *Illus.* fol. *London,* 1759.

Joslin, B. F. Principles of homœopathy; in a series of lectures. 12°. *New York,* 1850.

Jouanne, L. E. A new method of learning the gender of French nouns, presenting all the governing principles in four rhythmic fables. 12°. *New York,* 1857.

Jouffroy, Achille de. Des bateaux à vapeur; précis historique de leur invention; essai sur la théorie de leur mouvement et description d'un appareil palmipède applicable à tous les navires. 8°. *Paris,* 1839.

Jouffroy, M. Introduction to ethics; including a critical survey of moral systems. Transl. from the French by Wm. H. Channing. 2 v. 12°. *Boston,* 1865.

Jourdain, M. A treatise on the diseases and surgical operations of the mouth, and parts adjacent. 8°. *Baltimore,* 1840. **American library of dental science, v. 10.**

Jourdan, Antoine Jacques Louis. Dictionnaire raisonné étymologique, synonymique et polyglotte, des termes usités dans les sciences naturelles, etc. T. 1, A–K. T. 2, L–Z. 8°. *Paris,* 1834.

Jourdier, Auguste. Du drainage; extrait d'un rapport publié par la Société d'agriculture, sciences et arts de Meaux, sur un voyage agronomique en Angleterre et en Écosse. 8°. *Meaux,* 1853.

——— Le matériel agricole ou description et examen des instruments, des machines, des appareils et des outils. *Illus.* 8°. *Paris,* 1856.

Digitized by Google

Jourdier, Auguste. La pisciculture et la production des sangsues. Avec une introduction par M. Coste. 8°. *Paris*, 1856.

Journal d'agriculture pratique; moniteur des comices, des propriétaires et des fermiers, fondé en 1837, par le Dr. Bixio. Publié depuis 1850 sous la direction de M. J. A. Barral. 2e partie de la Maison rustique du 19e siècle. 1e série, T. 1–6, 1837–43. 2e série, T. 1–6, 1843–49. 3e série, T. 1–7, 1850–53. 4e série, T. 1–8, 1854–57. 5e série, 1858–76. [In 28 v.] [2 v. annually except in 1871, '72. The earlier volumes are entitled "Journal d'agriculture pratique, de jardinage et d'économie domestique".] 8°. *Paris*, 1837–76——.

——— d'agriculture progressive: le Draineur et le Génie rural réunis, sous la direction de M. E. Vianne et M. Jules Grandvoinnet. Nouvelle série, T. 1, 2. *Illus.* 8°. *Paris*, 1858.

——— de ménuiserie: spécialement destiné aux architectes, aux menuisiers et aux entrepreneurs. Par Adolphe Mangeant. Année 1–5. 4°. *Paris*, 1863–67.

——— de pharmacie et de chimie: contenant une revue de tous les travaux publiés en France et à l'étranger, sur les sciences physiques, naturelles, médicales et industrielles. 3e série, T. 1–46, 1842–64. 4e série, T. 1–24, 1865–76. 8°. *Paris*, 1842–76——.

——— der Physik. Hrsg. von F. Albrecht Carl Gren. B. 1–8, 1790–94. Neues Journal, B. 1–4, 1796–97. 8°. *Halle*, 1790–97.

——— des armes spéciales et de l'état-major. Publié sur les documents fournis par les officiers des armées françaises et étrangères, par J. Corréard. 1e série, T. 1–6, 1834–39. 2e série T. 1–7, 1840–46. 3e série, T. 1–14, 1847–53. 4e série, T. 1–14, 1854–60. 5e série, T. 1–24, 1861–67. 6e série, T. 1–7, 1868–69. 8°. *Paris*, 1834–69.

——— des connaissances usuelles et pratiques. Publié par M. Gillet de Grandmont et M. C. de Lasteyrie. T. 27–33. 8°. *Paris*, 1840–43.

——— des économistes; revue mensuelle d'économie politique et des questions agricoles, manufacturières et commerciales. T. 20, 21. 8°. *Paris*, 1848.

——— des fabricants de papier; publié par Louis Piette. T. 1–22. 8°. *Arlon*, 1854–76——.

Journal für Buchdruckerkunst, Schriftgiesserei und die verwandten Fächer. Hrsg. von Dr. Johann Heinrich Meyer. Jahre 1837–76. 26 Bde. 4°. *Braunschweig*, 1837–76——.

——— für Landwirthschaft. Im Auftrage des Centralausschusses der Königl. Hannoverschen Landwirthschafts-Gesellschaft und unter Mitwirkung der Landwirthschaftlichen Academie Göttingen-Weende, von Dr. W. Henneberg. B. 1–9, 1858–64. 2te Folge, B. 1, 2, 1866–67. [3 Supplement-Bände.] 8°. *Göttingen*, 1858–67.

——— für praktische Chemie. Hrsg. von Otto Linné Erdmann, Franz Wilhelm Schweigger-Seidel und Gustav Werther. B. 1–108, 1834–69. 2 Bde. Register. Neue Folge, B. 1–13 (Lauf. N. 109–121), 1870–76, hrsg. von Hermann Kolbe. 8°. *Leipzig*, 1834–76——.

——— général de l'imprimerie et de la librairie. 1re partie. Bibliographie, livres, compositions musicales, gravures, etc. T. 1–7, 1850–56. 2e série, T. 1–20, 1857–76. 8°. *Paris*, 1850–76——.

——— (The) of a naturalist. 16°. *Philadelphia*, 1831.

——— of agriculture. v. 1. July, 1845–March, 1847. 2d series, v. 9–12, 1859–66. 3d series, v. 2–4, 1867–68. 8°. *Edinburgh and London*, 1845–68.

——— of design and manufactures. v. 1–6. 8°. *London*, 1849–52.

——— of education, American. *See* **American.**

——— of gas lighting, water supply, and sanitary improvement. v. 1–28. [v. 1–5 ed. by T. G. Barlow.] fol. *London*, 1849–76——.

——— of industrial progress. Ed. by William K. Sullivan. 8°. *Dublin*, 1854–55. [v. 1 and beginning of v. 2, 1854–55, bound in 1 v. Some of the numbers are called "Journal of social progress"; others, "Monthly journal of industrial progress".]

——— of materia medica and pharmaceutic formulary. Conducted by Joseph Bates and H. A. Tilden. v. 1–4. 8°. *New Lebanon, N. Y.*, 1859–62.

——— of natural philosophy, chemistry and the arts. *See* **Nicholson,** William.

——— of science and the arts. *See* **Quarterly journal of science, literature and art.**

——— of science, The Edinburgh. *See* **Brewster,** *Sir* David.

Digitized by Google

Journal of the American institute of the city of New York. *See* NEW YORK.

——— of the Anthropological institute of Great Britain and Ireland. *See* LONDON. **Anthropological** institute.

——— of the Board of arts, for Upper Canada. *See* CANADA.

——— of the Chemical society of London. *See* LONDON. **Chemical** society.

——— of the Franklin institute. *See* **Franklin** institute.

——— of the medical sciences, The American. *See* **American** journal, etc.

——— of the Royal agricultural society of England. *See* LONDON. **Royal** agricultural society.

——— of the Society of arts, and of the institutions in union. *See* LONDON. **Society** of arts, etc.

——— The patent. *See* **Patent** journal.

——— Pharmaceutical. *See* **Pharmaceutical** journal.

——— The psychological and medico-legal. *See* **Psychological.**

Joyce, J. Scientific dialogues; intended for the instruction and entertainment of young people; in which the first principles of natural and experimental philosophy are fully explained. 12°. *London*, 1840.

Joynson, Francis Herbert. The mechanic's and student's guide in the designing and construction of general machine gearing, as eccentrics, screws, toothed wheels, etc., and the drawing of rectilineal and curved surfaces, with practical rules. 8°. *Edinburgh*, 1853.

Jozan, S. The art of pastel painting, with observations on drawing and coloring. Transl. from the French by Maria Parrot. 18°. *New York*, 1854.

Judenfeind-Hülsse, G. H. Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

Juge, —. Traité de la législation et de la jurisprudence des chemins de fer. *See* **Rebel** and **Juge.**

Jukes, J. Beete. Resources of Ireland. *See* **Sproule,** J.

Julia de Fontenelle, Jean Sébastien Eugène. Bibliothèque physico-économique; rédigée par. *See* **Bibliothèque.**

——— Manuel complet du bijoutier, du joaillier, de l'orfèvre, du graveur sur métaux et du changeur. *Illus.* T. 1, 2. 18°. *Paris*, 1832. **36 Manuels Roret.**

Julia de Fontenelle, Jean Sébastien Eugène. Manuel complet du blanchiment et du blanchissage, nettoyage et dégraissage des fils, etc. T. 1, 2. 18°. *Paris*, 1834. **40 Manuels Roret.**

——— Manuel complet du verrier et du fabricant de glaces, cristaux, pierres précieuses factices, verres colorés, yeux artificiels, etc. 18°. *Paris*, 1829. **101 Manuels Roret.**

——— Manuel complet, théorique et pratique, de pharmacie populaire. T. 1, 2. 18°. *Paris*, 1830. **3 Manuels Roret.**

——— Manuel de physique amusante. 5e éd. *Illus.* 18°. *Paris*, 1836. **27 Manuels Roret.**

——— Manuel des fabricans de chapeaux. *See* **Cluz. 96 Manuels Roret.**

——— Manuel du boulanger, etc. *See* **Benoit,** P. M. N. **34 Manuels Roret.**

——— Manuel du distillateur. *See* **Lebeaud. 81 Manuels Roret.**

——— Manuel du fabricant de sucre; ang. par. *See* **Blachette** and **Zoéga. 80 Manuels Roret.**

——— Manuel du fabricant et de l'épurateur d'huiles, suivi d'un aperçu sur l'éclairage par le gaz. 2e éd. *Illus.* 18°. *Paris*, 1836. **79 Manuels Roret.**

——— Manuel théorique et pratique du vinaigrier et du moutardier, suivi de nouvelles recherches sur la fermentation vineuse. 2e éd. *Illus.* 18°. *Paris*, 1836. **99 Manuels Roret.**

——— Theoretisch-praktisches Handbuch der Essig- und Senfbereitung. Aus dem Französischen, von Gustav H. Haumann. 8°. *Weimar*, 1844. **33 Neuer Schauplatz der Künste.**

——— Theoretisch-praktisches Handbuch der Oelbereitung und Oelreinigung, nebst einer Darstellung der Gasbeleuchtung. Aus dem Französischen, von G. H. Haumann. 2te Aufl. *Illus.* 8°. *Weimar*, 1844. **36 Neuer Schauplatz der Künste.**

——— and **Malepeyre,** F. The arts of tanning, currying and leather-dressing. Transl. from the French with numerous emendations and additions by Campbell Morfit. *Illus.* 8°. *Philadelphia*, 1852.

——— and **Poisson,** P. Manuel complet du marchand papetier et du régleur. 18°. *Paris*, 1828. **107 Manuels Roret.**

——— and **Tollard,** Henri. Manuel de l'herboriste, de l'épicier droguiste et du

Digitized by Google

Julia de Fontenelle—Continued.
grainier pépiniériste horticulteur. T. 1, 2. 18°. *Paris*, 1828. **43 Manuels Roret.**

Julien, M. Stanislas. Histoire et fabrication de la porcelaine chinoise. Ouvrage traduit du Chinois, par. Accompagné de notes et d'additions par M. Alphonse Salvétat, et un mémoire sur la porcelaine du Japon, traduit du Japonais par J. Hoffman. 8°. *Paris*, 1856.

Jullien, A. Manuel du sommelier. 5e éd. *Illus.* 18°. *Paris*, 1336. **63 Manuels Roret.**

Jullien, C. E. Handbuch der Dampfmaschinen. *See* **Grouvelle** and others. **158, 159 Neuer Schauplatz der Künste.**

——— Traité des machines à vapeur. *See* **Bataille,** E. M.

——— Traité théorique et pratique de la métallurgie du fer. Avec atlas. 4°. *Paris et Liége*, 1861.

Jullien, Marc Antoine. Recueil de la Société polytechnique; réd. par. *See* PARIS. **La société** polytechnique.

Jung, D. Johann Heinrich. Versuch eines Lehrbuchs der Fabrikwissenschaft. 8°. *Nürnberg*, 1785.

Junghuhn, Fr. Catalog der geologischen Sammlung von Java, oder Verzeichniss der Felsarten, etc. 8°. *'S Gravenhage*, 1854.

JUROR, The American. *See* **Wilson,** H. B.

JUTE spinning. Die Spinnerei-Industrie. Wollen-, Jute-, Hanf- etc. Spinnerei. *See* **Ramming,** Hermann. **281 Neuer Schauplatz der Künste.**

Knempfer, Engelbrecht. Amoenitatum exoticarum, politico-physico-medicarum, fasciculi 5. Quibus continentur variae relationes, observationes et descriptiones, rerum Persicarum et Ulterioris Asiae. 4°. *Lemgoviæ*, 1712.

Knemtz, L. F. A complete course of meteorology. With notes by Charles Martins, and an appendix by L. Lalanne. Transl. with notes and additions by C. V. Walker. 12°. *London*, 1845.

Kæppelin, D. Fabrication des tissus imprimés. Impression des étoffes de soie. *Illus.* 8°. *Paris*, 1860.

Kafka, Jg. Unterrichtsblätter für Weberei. fol. *Prag*, 1871.

Kaiser, Cajetan Georg. Bereitung des Chlors; übertragen v. *See* **Stratingh,** S. **46 Neuer Schauplatz der Künste.**

Kaiser, Cajetan Georg. Kunst und Gewerbe-Blatt; redig. v. *See* MUNICH. **Polytechnischer** Verein.

KALEIDÓSCOPE, History, etc., of the. *See* **Brewster,** *Sir* D.

Kalender für den sächsischen Berg- und Hüttenmann. *See* FREIBERG.

——— und statistisches Jahrbuch, für Königreich Sachsen. Jahr 1873-1875. 18°. *Dresden*, 1873-75.

Kallenbach, G. G. Album mittelalterlicher Kunst. 1ster B. *Illus.* l. 8°. *München*, 1846.

Kaltner, Eduard. Blinden- und Taubstummen. *See* VIENNA. **Gen.-Dir. der Weltausst 1873. Bericht. Gruppe 26.**

Kameke, H. F. Erläuterungen zu den Zeichnungen der preussischen Feld-Artillerie vom Jahre 1842. 8°. *Berlin*, 1847.

Kamschatka, Engines of the frigate. **Weale's papers on engineering, v. 1.**

Kane, Elisha Kent. Arctic explorations. The second Grinnell expedition in search of Sir John Franklin, 1853-55. 2 v. 8°. *Philadelphia*, 1856.

——— Astronomical observations in the Arctic seas. **Smiths'n contrib., v. 12.**

——— Magnetical observations in the Arctic seas. **Smiths'n contrib., v. 10.**

——— Meteorological observations in the Arctic seas. **Smiths'n contrib, v. 11.**

——— The United States Grinnell expedition in search of Sir John Franklin. 8°. *Philadelphia*, 1856.

Kane, *Sir* Robert. Elements of chemistry, theoretical and practical; including the most recent discoveries and applications of the science to medicine, pharmacy, agriculture, and manufactures. 2d ed. *Illus.* 8°. *Dublin*, 1849.

KANSAS, Coleoptera of. By J. L. LeConte. **Smiths'n contrib., v. 11.**

——— General laws of the territory, passed at the fifth session of the legislative assembly. 8°. *Lawrence, K. T.*, 1859.

Kärcher, E., Vorrede von. Deutsch-Englisches Wörterbuch. *See* **Hilpert,** J. L.

Karmarsch, Karl. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

——— Geschichte der Technologie seit der Mitte des achtzehnten Jahrhunderts. 8°. *München*, 1872.

——— Handbuch der mechanischen Technologie. 3te Aufl. B. 1-2. 8°. *Hannover*, 1857-58.

Digitized by Google

Karmarsch, Karl. Katalog der Werkzeug-Sammlung an der königlichen polytechnischen Schule zu Hannover. 8°. *Hannover*, 1870.

——— Tapeten- und Buntpapier-Industrie. Vorwort von. *See* **Exner,** W. F. **25 Neuer Schauplatz der Künste.**

——— Technologisches Wörterbuch. Vorwort von. *See* **Beil,** J. A.

——— and **Heeren,** Friedrich. Technisches Wörterbuch oder Handbuch der Gewerbkunde in alphabetischer Ordnung. 1ster B., A-F. 2ter B., G-P. 3ter B., Q-Z. 8°. *Prag*, 1854-57.

Kärner, Ch. J. Die Porzellanmalerei, ihre Technik und Anwendung für Dilettanten. 12°. *Berlin*, 1870.

Karsten, C. J. B. Archiv für Mineralogie, etc. *See* **Archiv.**

——— Manuel de la métallurgie du fer. Traduit de l'allemand. Par F. J. Culmann. 2e éd. T. 3. 8°. *Metz*, 1830.

——— System der Metallurgie, geschichtlich, statistisch, theoretisch und technisch. 5 Bde. 8°. *Berlin*, 1831-32.

Kater, Henry, and **Lardner,** Dionysius. A treatise on mechanics. 16°. *London*, 1844. New ed., 1852. [2 copies.] **Lardner's cabinet cyclopædia, v. 102.**

Katterfelto, Comas, Jonas, etc. The whole art of legerdemain, or the black art laid open and explained. 12°. *London, n. d.* pp. 38.

Kaufmann, A. Architecture rurale et communale. *See* **Duval,** C.

Kaven, A. v. Ueber die Construction von Wegebrücken, Brückthoren und Rampen-Canälen. 4°. *Hannover*, 1869.

Kayser, Christian Gottlob. Allgemeines Bücher-Lexikon, B. 6 und 7; hrsg. von. *See* **Heinsius,** J. W.

Kecht, J. S. Verbesserter praktischer Weinbau in Gärten und auf Weinbergen. 12°. *Berlin*, 1858.

KEDGE-ANCHOR, The. *See* **Brady,** William.

Keefer, Thomas C. Report on a preliminary survey for the water supply of the city of Montreal. 8°. *Montreal*, 1852. pp. 26.

Keene, James B. A hand book of practical gauging: instructions in the mode of ascertaining the strengths of spirits by means of Sikes's hydrometer, and an explanation of the theory of its action; to which is added a chapter on distillation, describing the process in operation at the custom-house for ascertaining the strength of wines. *Illus.* 8°. *London*, 1861.

Keetels, Jean Gustave. A new method of learning the French language. 12°. *New York*, 1859.

——— Oral method with French. In 3 parts. 16°. *New York*, 1869.

KEHL, Eisenbahnbauten bei. *See* CARLSRUHE.

Keightley, Thomas. Outlines of history. 16°. *London.* **Lardner's cabinet cyclopædia, v. 1.**

Keith, Thomas. The elements of plane geometry, containing the first six books of Euclid, etc. 8°. *London*, 1814.

——— A manual of instruction in practical navigation. 8°. *Boston*, 1858.

——— A new treatise on the use of the globes, or a philosophical view of the earth and heavens. Rev. by R. Adrian. 8°. *New York*, 1832.

——— Trigonometry, plane and spherical, with the application thereof to altitudes and distances, and to astronomical problems, including stereographic projection of the sphere, and the theory of navigation. 8°. *London*, 1820.

Kelham, Robert. A dictionary of the Norman or old French language collected from acts of parliament, parliament rolls, journals, acts of state, records, law books, antient histories, and manuscripts; also the laws of William the conqueror. 8°. *London*, 1779.

——— Law dictionary: dictionary of the Norman and old French language; by. *See* **Bouvier,** J.

Kelland, Philip. Theory of heat. 8°. *Cambridge*, 1837.

Keller, Charles M. Before the Hon. D. P. Holloway. In the matter of the interference between the application of W. E. Hagan and the patent granted to S. Groom, dated June 10th, 1862, for improvement in stoves. Argument of C. M. Keller for W. E. Hagan. 8°. *New York*, 1863. pp. 46.

——— In the matter of the application of Thaddeus Hyatt, for the extension of letters patent for illuminating vault covers, bearing date Nov. 12, 1845. Argument of C. M. Keller. 8°. *New York*, 1855.

Keller, Edward. New German method, or a new system of teaching the modern languages. 12°. *St. Louis, Mo.*, 1858.

Digitized by Google

Keller, M. O. Mémoire sur l'exploitation de l'argile salifère, et le traitement du sel dans le Salz-Kammergut. 8°. *Paris*, 1862.

Kellerbauer, Th. Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

Kelly, James. An American catalogue of books, original and reprints, published in the United States from January, 1861, to January, 1866, etc. 8°. *New York*, 1866.

Kelly, M. J. The base-ball guide for 1868, containing rules of the game, championship matches, muffin matches, and game on the ice. 18°. *New York*, 1868.

Kelly, Patrick. The universal cambist and commercial instructor. 2d ed., corrected from verified standards by order and aid of government, and the East India company: and kept correct during subsequent alterations by a series of supplements, comprising the new laws for establishing the imperial system of British weights and measures. v. 1, 2. 4°. *London*, 1835.

Kemlo, F. Kemlo's watch-repairer's hand-book. 8°. *Boston*, 1869.

Kemp, Dixon. Yacht designing: a treatise on the practical application of the scientific principles upon which is based the art of designing yachts. *Illus.* fol. *London*, 1876.

Kemp, T. Lindley. The phases of matter: being an outline of the discoveries and applications of modern chemistry. 2 v. 8°. *London*, 1855.

Kempe, H. R. A hand book of electrical testing. 16°. *London and New York*, 1876.

Kendrick, Asahel C. Greek Ollendorff: a progressive exhibition of the principles of the Greek grammar. 12°. *New York*, 1851.

——— An introduction to the Greek language, containing an outline of the grammar, with appropriate exercises. 2d ed. 12°. *Boston and New York*, 1847.

Kennedy, J. C. G. Preliminary report on the 8th census. *See* UNITED STATES. **Interior** dept. Census bureau.

Kennion, John W. The architect's and builder's guide: an elaborate description of all the public, commercial, philanthropic, literary and ecclesiastical buildings constructed and about to be erected next spring in New York and its environs. 8°. *New York*, 1868.

Kenrick, W. An account of the automaton constructed by Orffyreus, in two letters: the one from Professor Gravesande to Sir Isaac Newton, the other from Baron Fischer to Dr. Desaguliers. 4°. *London*, 1770.

Kentish, T. A treatise on a box of instruments and the slide-rule, with the theory of trigonometry and logarithms. 12°. *London*, 1839. 2d ed., 1847.

Keravenan. Francis Bernard de. Argument and testimony in the matter of the cross opposition of Keravenan and Racey. *See* **Serrell,** L. W.

KERGUELEN island, Natural history of. By J. H. Kidder. *See* UNITED STATES. **Interior dept. National museum. Bulletin 1, 2.**

Kerl, Bruno. Abrisz der Thonwaarenindustrie. 8°. *Braunschweig*, 1871.

——— Grundriss der allgemeinen Hüttenkunde. 8°. *Leipzig*, 1872.

——— Grundriss der Eisenhüttenkunde. 8°. *Leipzig*, 1875.

——— Grundriss der Eisenprobirkunst. Anhang zum Grundriss der Eisenhüttenkunde. 8°. *Leipzig*, 1875.

——— Grundrisz der Salinenkunde. 8°. *Braunschweig*, 1868.

——— Handbuch der metallurgischen Hüttenkunde. B. 1-3. [3te in 2 Abth.] 8°. *Freiberg*, 1855.

——— Metallurgische Probirkunst. 8°. *Leipzig*, 1866.

——— Th. Bodemann's Anleitung zur berg- und hüttenmännischen Probierkunst. 2te Aufl. 8°. *Clausthal*, 1857.

Kermaingant, F. Mémoire sur le projet d'un chemin de fer de Lyon à Marseille. *See* FRANCE. **Ministère** des travaux publics.

Kern, G. M. Practical landscape gardening, with reference to the improvement of rural residences; giving the general principles of the art; with directions for planting shade trees, shrubbery and flowers, and laying out grounds. 3d ed. 12°. *Cincinnati*, 1855.

Kerpely, Anton. Das Eisen auf der Wiener Weltausstellung, 1873. 8°. *Schemnitz*, 1873.

Kessels, Heinrich. Technologische Terminologie, enthaltend eine alphabetische Zusammenstellung und Erklärung aller technischen Ausdrücke und Kunstwörter. 8°. *Prag*, 1864.

Digitized by Google

Kessler, Georg. Photographie auf Stahl, Kupfer und Stein, zur Anfertigung von Druckplatten für den Kupfer-, Stein- und Buchdruck. Die neuesten Entdeckungen auf dem Gebiete der Photographie. Hrsg. von. 8°. *Berlin*, 1856.

Kestler, Joannes Stephanus. Physiologia experimentalis; redegit. *See* **Kircher,** A.

Key to Crittenden's book-keeping. *See* **Crittenden,** S. W.

——— to Davies' Bourdon. With many additional examples, illustrating the algebraic analysis: also a solution of all the difficult examples in Davies' Legendre. 8°. *New York*, 1856.

KEYS, Treatise on. *See* **Price,** G.

Kick, Friedrich. Mehl und Mehlfabrikate. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 4.**

——— Die Mehlfabrikation. Ein Lehrbuch des Mühlenbetriebes. 8°. *Leipzig*, 1871.

Kidd, J. A geological essay on the imperfect evidence in support of a theory of the earth, deducible either from the changes produced on its surface by the operation of existing causes, or from its general structure. 8°. *Oxford*, 1815.

Kidd, Samuel. China; or, illustrations of the symbols, philosophy, antiquities, customs, superstitions, laws, government, education and literature of the Chinese: derived from original sources and accompanied with drawings from native works. 8°. *London*, 1841.

Kidd, Whitten E. Circuit court of the United States, southern district of New York. Whitten E. Kidd vs. Jasper Spence et al. Containing the opinion of Judge Ingersoll. 8°. *New York*, 1859. pp. 4. [4 copies.]

Kidd, William, of Hammersmith. Kidd's own journal for inter-communications on natural history, popular science, and things in general. 5 v. 8°. *London*, 1852–54.

Kidder, J. H. Contributions to the natural history of Kerguelen island, made in connection with the United States transit of Venus expedition, 1874–75. I. Ornithology. II. ——. 8°. *Washington*, 1875–76. UNITED STATES. **Interior dept. National museum. Bulletin 1, 2.**

Kidder, K. P. Kidder's guide to the apiarian science; a practical treatise in every department of bee culture and bee management. 12°. *Burlington, Vt.*, 1858.

Kidder, K. P.—Continued.

KIDNEY, A treatise on the diseases of the. *See* **Corfe,** George.

Kiessling, Adolf. Zur Kritik der roemischen Archaeologie des Dionysius von Halikarnass. 4°. *Basel*, 1868.

Kik, W. Sammlung von Rechnungs-Beispielen über die wichtigsten Lehrsätze der Landwirthschaft. 2 Bde. 12°. *Stuttgart*, 1859.

Kilian, Hermann Friedrich. Armamentarium Lucinae novum; oder umfassende Sammlung von Abbildungen der in der Geburtshülfe gebräuchlichen älteren und neueren Instrumente. *Illus.* obl. 4°. *Bonn*, 1856.

——— Bericht über die Versammlung deutscher Naturforscher und Aerzte; hrsg. v. *See* **Versammlung.**

KINDLING. Zündwaaren und Explosivstoffe. Von Wilhelm Friedrich Giutl. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 3.**

Kindt, Jules. Industrie linière, fabrication des fils et toiles de lin. 12°. *Bruxelles, n. d.*

——— Situation des principales branches de l'industrie belge en 1860. 8°. *Bruxelles*, 1860.

KINEMATICS. Theoretische Kinematik. *See* **Reuleaux,** F.

King, C. W. The natural history of gems, or semi-precious stones. 8°. *London*, 1870.

——— The natural history of precious stones and of the precious metals. 8°. *London*, 1867.

King, Charles. A memoir of the construction, cost and capacity of the Croton aqueduct, compiled from official documents: together with an account of the civic celebration Oct. 14, 1842, on occasion of the completion of the great work: preceded by an essay on ancient and modern aqueducts. 4°. *New York*, 1843.

King, Edmund Fillingham. Ten thousand wonderful things: comprising the marvellous and rare, odd, curious, quaint, eccentric and extraordinary, in all ages and nations, in art, nature and science: including many wonders of the world. 12°. *New York, n. d.*

Digitized by Google

King, James W. Lessons and notes on steam, etc.; revised by. *See* **King,** William H.

King, John. The causes, symptons, pathology and treatment of chronic diseases. 8°. *Cincinnati,* 1867.

——— The microscopist's companion; a manual of practical microscopy and glossary of the principal terms used in microscopic science. 8°. *Cincinnati,* 1859.

King, N. H. and H. A. The bee-keeper's text book, with alphabetical index: a complete reference book on all subjects connected with the culture of the honey bee, in both common and movable comb hives. 9th ed. 12°. *New York,* 1869.

King, W. R. Counterpoise gun-carriages and platforms. Published by the direction of Bvt. Maj. Gen. A. A. Humphreys. *See* UNITED STATES. **War** department.

——— Report on materials for defensive armor. *See* UNITED STATES. **War dept. Professional papers of corps of engineers, No. 17.**

King, W. Ross. The sportsman and naturalist in Canada: notes on the natural history of the game, game birds, and fish of that country. *Illus.* l. 8°. *London,* 1866.

King, William H. Lessons and practical notes on steam, the steam engine, propellers, etc.; rev. by Chief Engineer J. W. King, U. S. N. 8°. *New York,* 1860.

Kingsbury, Benjamin. A treatise on razors; in which the weight, shape, and temper of a razor, the means of keeping it in order, and the manner of using it are particularly considered. 9th ed. 8°. *London,* 1821. pp. 46.

Kingsford, W. History, structure, and statistics of plank roads in the United States and Canada. With remarks on roads in general, by F. G. Skinner: and a letter on plank roads by Charles E. Clarke. 8°. *Philadelphia,* 1851. pp. 40.

Kingsland, Richards & co., Original drawings of ornamental mantel, pier and oval looking-glass frames, window cornices, bases, and console tables, designed and manufactured by. fol. *New York,* 1855.

Kinne, Asa. Questions and answers on law, alphabetically arranged, with references to the most approved authors. 8°. *New York,* 1839.

Kip, William Ingraham. The catacombs of Rome, as illustrating the church of the first three centuries. 16°. *New York,* 1854.

Kipping, Robert. Elementary treatise on sails and sail-making with draughting, and the centre of effort of the sails: with an appendix, comprising the inventions of self-reefing topsails of Captain Cunningham and Captain Howe: also a cutting board, or table by Mr. Pittard. 5th ed. *Illus.* 12°. *London,* 1860-61.

——— Rudimentary treatise on masting, mast-making, and rigging of ships; also tables of spars. *Illus.* 12°. *London,* 1853-54. **Weale's series, No. 54.**

Kircher, Athanasius. Physiologia Kircheriana experimentalis quâ, summâ argumentorum multitudine et varietate, naturalium rerum scientia, per experimenta physica, mathematica, medica, chymica, musica, magnetica, mechanica comprobatur atque stabilitur. Quam ex vastis operibus P. Athanasii Kircheri extraxit, et in hunc ordinem per classes redegit Romae, anno 1675 Joannes Stephanus Kestlerus. fol. *Amstelodami,* 1680.

Kirchhoff, G. Researches on the solar spectrum, and the spectra of chemical elements. Transl. by Henry E. Roscoe. 4°. *Cambridge and London,* 1862-63.

Kirkbride, Thomas S. Reports of the Pennsylvania hospital for the insane. *See* PENNSYLVANIA.

Kirkes, William Senhouse. Manual of physiology. New Amer. from last London ed. 8°. *Philadelphia,* 1857.

Kirkland, W. A. Report on the Vienna exhibition; ordnance and marine material. *See* UNITED STATES. **Navy** dept. Ordnance papers.

Kirkman, Thomas Penyngton. First mnemonical lessons in geometry, algebra, and trigonometry. 12°. *London,* 1852. **Weale's series, No. 105.**

Kirkwood, Daniel. Meteoric astronomy: a treatise on shooting-stars, fireballs, and aerolites. 8°. *Philadelphia,* 1867.

Kirkwood, James P. Report on the filtration of river waters, for the supply of cities, as practised in Europe, made to the board of water commissioners of the city of St. Louis. 4°. *New York,* 1869.

Digitized by Google

Kirn, — von. Leitfaden für den Unterricht im Wasserbau. *Illus.* 8°. *Berlin,* 1861.

Kirsch, A. Die Fabrication der Portefeuilles, Etuis und Ledergalanteriewaaren nach ihrem neuesten Standpuncte. *Illus.* 8°. *Weimar,* 1853. **202 Neuer Schauplatz der Künste.**

Kirschbaum, C. L. Jahrbücher des Vereins für Naturkunde; hrsg. v. *See* NASSAU.

KITCHEN garden, The companion for the. *See* **Phillips,** Henry.

Kitchiner, William. The economy of the eyes: precepts for the improvement and preservation of the sight. 16°. *London,* 1824.

——— The traveller's oracle, or maxims for locomotion; containing precepts for promoting the pleasures, and hints for preserving the health of travellers. 2 v. 18°. *London,* 1827.

Kjerulf, Theodor. Das Christiania-Silurbecken, chemisch-geognostisch untersucht. Auf Veranstaltung des academischen Collegiums hrsg. von Adolph Strecker. Mit einer geognostischen Übersichtskarte und Profilen. 4°. *Christiania,* 1855.

——— Om Skuringsmaerker, Glacialformationen og Terrasser samt om Grundfjeldets og Sparagmitfjeldets maegtighed i Norge. 1. Grundfjeldet. 2. Sparagmitfjeldet. Med Kart. [Part 2 is entitled "Glacialformationen, Terrasser og Strandlinier".] 4°. *Kristiania,* 1871–73.

Klaar, Alfred. Buchhandel und Literatur des Auslandes. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

KLAGENFURT. Kärntnerischer (alter) Seidenbau-Verein zu Klagenfurt in den Jahren 1868-69. Bericht über die Thätigkeit. 8°. *Klagenfurt,* 1870——.

——— Kärntnerisches Gewerbeblatt. Von J. Hoffmann. Neue Folge, B. 1–4, 1867–70. 8°. *Klagenfurt,* 1867–70.

——— Naturhistorischen Landesmuseums von Kärnten, Jahrbuch des. Von J. L. Canaval. Heft 1–12, 1852–77. 8°. *Klagenfurt,* 1852–77——.

Klapp, H. Milner. Krider's sporting anecdotes; ed. by. *See* **Krider,** John.

Klaproth, M. H., and **Wolff,** F. Dictionnaire de chimie. Traduit de l'allemand, avec des notes, par E. J. B. Bouillon-Lagrange et par H. A. Vogel. T. 1–4. 8°. *Paris,* 1810–11.

Klasen, Ludwig. Handbuch der Hochbau-Constructionen in Eisen und anderen Metallen für Architecten, Ingenieure, Constructeure, Bau-Handwerker und technische Lehranstalten; hrsg. von. *Illus.* 1., 3. Lfg. 4°. *Leipzig,* 1875–76.

Kleffel, L. G. Handbuch der praktischen Photographie. Nebst einer ausführlichen Abhandlung über Stereoscopie. 2te Aufl. *Illus.* 8°. *Berlin,* 1860.

——— Das Neueste auf dem Gebiete der Photographie. 12°. *Leipzig,* 1870.

Klein, L. Die innern Communicationen der Vereinigten Staaten; hrsg. v. *See* **Gerstner,** F. A. von.

Klein, Ludwig. Sammlung eiserner Brücken-Constructionen ausgeführt bei den Bahnen des Vereins deutscher Eisenbahn-Verwaltungen. Nebst einem Anhange enthaltend die Beschreibung der Niagara Hängebrücke. *Illus.* fol. *Stuttgart,* 1860. Neue Folge, *Stuttgart,* 1874.

Klein, Pierre. Notice sur les fourneaux économiques pour la vente de portions d'aliments à cinq centimes. 8°. *Paris,* 1856. pp. 31.

Kleine, Georg. Die Bienenzeitung; hrsg. v. *See* **Bienenzeitung.**

Kleine americanische Elementärschulen. 16°. *St. Louis,* 1859. pp. 46.

Kleinschrod, C. Th. von. Die internationale Patentgesetzgebung nach ihren Prinzipien, nebst Vorschlägen für ein künftiges gemeines deutsches Patentrecht. 8°. *Erlangen,* 1855.

Klencke, Hermann. Die Verfälschung der Nahrungsmittel und Getränke, der Kolonialwaaren, Droguen und Manufacte, der gewerblichen und landwirthschaftlichen Producte. Nach Arthur Hill Hassall und A. Chevallier. *Illus.* 8°. *Leipzig,* 1858.

Kletzinsky, V. Die chemischen Grundstoffe oder Elemente. Eine atomistische Skizze. 8°. *Wien,* 1875.

Klimius, Nicholas. A journey to the world under ground. 24°. *London,* 1742.

Klinkhardt, Julius. Verzeichniss neuer Bücher. *See* **Thun,** J. P.

Klippart, John H. The principles and practice of land drainage; embracing a history of under-draining, its operation and advantages: a description of various

Digitized by Google

Klippart, John H.—Continued.
kinds of drains, with directions for their construction; the manufacture of drain-tiles, etc. 2d ed. 8°. *Cincinnati*, 1867.

Klipstein, Louis F. Aelfric's Anglo-Saxon homily on the birthday of St. Gregory, and collateral extracts from king Alfred's version of Bede's ecclesiastical history,—and from the Saxon chronicle. 16°. *New York*, 1849.

——— A grammar of the Anglo-Saxon language. 12°. *New York*, 1848.

Kloss, M. Translation of Prof. Kloss' dumb-bell instructor. *See* **Lewis,** Dio.

Kluge, H. O. Turngeräthe und Turneinrichtungen, für Schul- und Militair-Turn-Anstalten und Turn-Vereine. Unter Mitwirkung von Dr. Carl Euler. 8° *Berlin*, 1872.

Kluge, Karl Emil. Handbuch der Edelsteinkunde für Mineralogen, Steinschneider und Juweliere. 8°. *Leipzig*, 1860.

Knab, —. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

Knapp, F. Annual report of the progress of chemistry. *See* **Liebig,** J. v., and **Kopp,** H.

——— Chemical technology; or, chemistry applied to the arts and to manufactures. Edited with numerous notes and additions: by Edmund Ronalds and Thomas Richardson. v. 1-3. *Illus.* 8°. *London*, 1848-51. **Library of illustrated standard scientific works, v. 3, 4, and 10.**

——— Same. Amer. ed. 8°. 1848-49.

——— Geschichte der Gasbeleuchtung. *See* **Schilling,** N. H.

——— Jahresbericht über die Fortschritte der Chemie; unter Mitwirkung v. *See* **Liebig,** J. v., and **Kopp,** H.

Knapp, H. A treatise on intraocular tumors. Transl. from the German by S. Cole. roy. 8°. *New York*, 1869.

Knapp, Samuel L. History and topography of the United States; additions by. *See* **Hinton,** J. H.

Kneeland, Samuel. Annual of scientific discovery; ed. by. *See* **Wells,** David A.

Kneeland, Samuel, *jr.* Andry's diseases of the heart; transl. by. *See* **Andry,** Felix.

Knight, Cameron. The mechanician and constructor for engineers, including forging, planing, lining, slotting, shaping, turning, screw-cutting, etc. *Illus.* 4°. *London*, 1860.

Knight, Charles. The English cyclopædia, a new dictionary of universal knowledge; conducted by. 23 v. *Illus.* 4°. *London*, 1854-62.

CONTENTS.

Division 1. Geography, v. 1-4.
2. Natural history, v. 1-4.
3. Biography, v. 1-6.
4. Arts and sciences, v. 1-8.
Synoptical index, 1 v.

——— Kapital und Arbeit, mit Inbegriff der Ergebnisse der Maschinerie. Aus dem Englischen von Theodor Rothe. 16°. *Stuttgart*, 1847. **Wochenbände, No. 69-73.**

Knight, Edward H. Knight's American mechanical dictionary: being a description of tools, instruments, machines, processes and engineering; history of inventions; general technological vocabulary; digest of mechanical appliances in science and the arts. 3 v. *Illus.* 8°. *New York*, 1874-76.

Knight, F. New book of seven hundred and fifty-eight plain, ornamented and reversed cyphers. Engraved by Nathaniel Gill, and J. H. Whiteman. 8°. *London*, *n. d.*

Knight, J., and **Latrobe,** Benj. H. Report upon the plan of construction of several of the principal railroads in the northern and middle states; and for a railway structure for a new track on the Baltimore and Ohio railroad. 8°. *Baltimore*, 1838.

Knirr, Josef. Mathematische Lehrmittel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

KNITTING, Art of. *See* **Aiken,** J. B.

——— Assistant in. *See* **Gaugain,** *Mrs.* J.

——— Knitted lace collar receipt book. *See* **Baynes,** *Mrs.* G. J.

——— Ladies' guide to. *See* **Stephens,** Ann S.

——— A text-book of. *See* **Lonely hours.**

Knoderer, Karl. Neue wichtige Erfindung in der Lohgerberei. Aus dem Französischen von Christian Heinrich Schmidt. 8°. *Weimar*, 1857. **234 Neuer Schauplatz der Künste.**

Knop, A. Jahresbericht über die Fortschritte der Chemie; v. *See* **Liebig,** J. v., and **Kopp,** H.

Knop, W. Die Bonitirung der Ackererde. 12°. *Leipzig*, 1871.

Knorr, Eduard. Handbuch der Schiffs-Dampfmaschinenkunde. 8°. *Berlin*, 1867.

Digitized by Google

Knorr's methodical guide for teachers of music. *See* **Schmidt**, G. A.

KNOTS, The book of. *See* **Bowling**, Tom.

KNOWLEDGE, Useful. *See* **Bingley**, William.

—— —— Encyclopedia of. *See* **Blake**, J. L.

Kobell, Franz von. Denkrede auf Johann Nepomuk von Fuchs. 4°. *München*, 1856. pp. 32.

—— Mineralogy simplified: a short method of determining and classifying minerals. by means of simple chemical experiments in the dry and wet way. Transl. from the German by Dr. Henri Erni. 12°. *Philadelphia*, 1867.

—— Tafeln zur Bestimmung der Mineralien, mittelst einfacher chemischer Versuche auf trockenem und nassem Wege. 8°. *München*, 1853.

Koecker, Leonard. An essay on the diseases of the jaws and their treatment, with observations on the amputation of a part, or the whole of the inferior maxilla. *Illus.* 12°. *London*, 1828.

—— Principles of dental surgery: exhibiting a new method of treating the diseases of the teeth and gums calculated to promote their health and beauty; a general view of the present state of dental surgery, with references to the abuses of the art. 8°. *Baltimore*, 1842. **American library of dental science, v. 3.**

Kögel, K. H. Mühlenbauer; hrsg. v. *See* **Bergmann**, L. **99 Neuer Schauplatz der Künste.**

Kohl, Friedrich. Elemente von Maschinen. 1, 2. Abth. *Illus.* 4°. *Leipzig*, 1845–51.

—— Geschichte der Jacquard Maschine, und der sich ihr anschliessenden Abänderungen und Verbesserungen. Nebst der Biographie Jacquards. Text und Atlas, 4°. *Berlin*, 1872.

Kohler, Karl Franz. Thun's Verzeichniss neuer Bücher. *See* **Thun**, J. P.

Kohlrausch, F. An introduction to physical measurements, with appendices on absolute electrical measurement, etc. Transl. from the 2d Germ. ed. by T. H. Waller and H. R. Proctor. roy. 8°. *New York*, 1874.

Kohn, Carl, **Flattich**, Wilhelm, and **Ludwig**, Bernhard. Korbflechterei, Bautischlerei, Möbeltischlerei. *See* **Kohn, Flattich**, and **Ludwig**—Continued.

VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 8.**

—— and **Zeman**, Johann. Näh-, Strick- und Stickmaschinen. Spinnereimaschinen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Kolbe, Hermann. Ausführliches Lehrbuch der organischen Chemie. 3 Bde. 8°. *Braunschweig*, 1854–68.

—— Ueber die chemische Constitution organischer Verbindungen. 4°. *Marburg*, 1858. pp. 25.

Koller, Theodor. Neueste Erfindungen und Erfahrungen. *See* **Neueste.**

—— Der praktische Techniker der Neuzeit. *See* **Praktische.**

Koltz, J. P. J. Traité de pisciculture. Multiplication artificielle des poissons. 2e éd. *Illus.* 8°. *Paris*, 1858.

Kombst, Gustav. Physical atlas; by. *See* **Johnston**, A. K.

Koner, W. The life of the Greeks and Romans. *See* **Guhl**, E.

König, Friedrich. Die Pumpen. Eine Darstellung ihrer Theorie, Construktion und Wirkungsweise. 8°. *Jena*, 1839.

König, Johann. Grundriss der Schlosserkunst. Mit einem Atlas. 8°. *Weimar*, 1849. **168 Neuer Schauplatz der Künste.**

KÖNIGSBERG. Königlich-physikalisch-ökonomische Gesellschaft zu Königsberg. Schriften. Jahrgang 1–13, 1860–72. 4°. *Königsberg*, 1861–72.

Konneritz, L. von. Mittheilung mannichfaltiger Versuche und Erfahrungen Edelsteine kunstgemäss zu schleifen und sie in Glasflüssen täuschend ähnlich nachzubilden. Nebst einer Uebersicht der mehrsten schleifbaren Mineralien, einigen Abbildungen facettirter Edelsteine und der dazu erforderlichen Werkzeuge. *Illus.* 8°. *Weimar*, 1841. **114 Neuer Schauplatz der Künste.**

Konstantinoff, *Gen.-Major.* Lectures sur les fusées de guerre. Faites en 1860. Texte, 8°; pl., obl. 4°. *Paris*, 1861.

Kopp, Hermann. Ansichten über die Aufgabe der Chemie und über die Grundbestandtheile der Körper. Bei den bedeutendern Chemikern; von Geber bis G. E. Stahl. Die Entdeckung der Zusammensetzung des Wassers. 8°. *Braunschweig*, 1875.

Digitized by Google

Kopp, Hermann. Jahresbericht über die Fortschritte der Chemie. *See* **Liebig,** J. v.

——— Progress of chemistry. *See* **Liebig,** J. von.

Koppe, J. G. Unterricht im Ackerbau und in der Viehzucht. 3 Bde. 12°. *Berlin,* 1845.

Körbling, Ignatius. Gepanzerte Drehkuppeln; deutsch bearb. v. *See* **Piron,** F. P. J.

Kost, John. Elements of materia medica and therapeutics. 8°. *Cincinnati,* 1849.

——— The practice of medicine, according to the plan most approved by the reformed or botanic colleges of the United States, etc., embracing a treatise on materia medica and pharmacy. 8°. *Mt. Vernon,* 1847.

Kottenkamp, Franz. Die Baukunst der Insekten; uebers. von. *See* **Rennie,** James.

——— Darstellung der Elektrizität; uebers. von. *See* **Roget,** P. M.

——— Darstellung des Magnetismus; uebers. von. *See* **Roget,** P. M.

——— Die Menagerie; uebers. von. *See* **Menagerie.**

——— Vorschule der Thierkunde; uebers. v. *See* **Vorschule.**

Kraatz, G. Berliner entomologische Zeitschrift; red. v. *See* BERLIN.

——— Verzeichniss der Käfer Deutschlands. Hrsg. von dem Entomologischen Verein in Berlin. 12°. *Berlin,* 1869.

Krafft, J. Ch. Portes cochères, portes d'entrée, croisées, balcons, entablatures, etc., de Paris. French-English-German. T. 1-2. l. 4°. *Paris,* 1809-10.

Krans, M. F. Étude sur le four à gaz et à chaleur régénérée de M. Siemens. 8°. *Paris,* 1873.

Krant, C. Jahresbericht über die landwirthschaftlichen Pflanzenproductionen; bearbeitet in Verbindung mit. *See* **Henneberg,** W.

Krantz, A. Verzeichniss von verkäuflichen Mineralien, Gebirgsarten, Petrefacten, etc. 8te Aufl. 8°. *Bonn,* 1866.

Krauss, Anton. Geist der österreichischen Gesetzgebung zur Aufmunterung der Erfindungen im Fache der Industrie. Mit vergleichenden Bemerkungen über den Geist der englischen, französischen und nordamerikanischen Patent-Gesetzgebung. 8°. *Wien,* 1838.

Krauss, E. C. F. Elements of German grammar. 12°. *Boston,* 1869.

Krausz, Johann. Oeconomisches Haus- und Kunst-Buch, oder Sammlung ausgesuchter Vorschriften. 12°. *Allentown,* 1819.

Kreiger, Johann Christian. Handbuch der Literatur der Gewerbskunde, in alphabetischer Ordnung, bis zum Jahr 1812 8°. *Marburg,* 1815-20.

Krenner, Sándor József. A Dobsinai Jégbarlang. A Kir, Magyar Természettudományi Társulat megbizásából megvizsgálta és leirta. Szöveggel és hat Könyomatu Táblával. [With German version.] *Illus.* 4°. fol. *Budapest,* 1874.

Krepp, Frederick Charles. The sewage question: review of all systems and methods hitherto employed in various countries for draining cities and utilising sewage: treated with reference to public health, agriculture, and national economy generally. Also a description of Captain Liernur's system for removal of fæcal solids, fluids, etc. 8°. *London,* 1867.

Kresz, Georg Ludwig von. Die Galvanoplastik für industrielle und künstlerische Zwecke. 8°. *Frankfurt a. Main,* 1867.

Kreutzer, Karl Joseph. Jahresbericht über die Fortschritte und Leistungen im Gebiete der Fotographie und Stereoskopie, mit genauer Nachweisung der Literatur. 8°. *Wien,* 1855-61.

——— Zeitschrift für Fotografie und Stereoskopie; hrsg. von. *See* **Zeitschrift.**

Kreuzig, Anson. Fertige Kleider, Männer-Kleider und Kostume-Mieder. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Krider, John. Sporting anecdotes, illustrative of the habits of certain varieties of American game. Ed. by H. Milnor Klapp. 8°. *Philadelphia,* 1853.

Krieg, Ludwig J. Theorie und praktische Anwendung von Anilin in der Färberei und Druckerei, nebst Bemerkungen über die Anilin-Surrogate. 2te Aufl. 8°. *Berlin,* 1862.

Kronauer, J. H. Atlas für mechanische Technologie. 1. Abtheilung: Spinnerei und Weberei. 2. Metall- und Holzverarbeitung. Erklärungen. 4° and 8°.

Krug, Eduard. Muster-Sammlung für Bau- und Meubeltischler, begonnen von; fortgesetzt, entworfen und gravirt von A. Harrer. 2te Folge. Heft 1-2. 4°. *München,* 1874.

Digitized by Google

Krug, Eduard. Muster-Sammlung für Bautischler. Heft 1-12. 4°. *München*, 1843–46.

——— Muster-Sammlung für Schlosser von Vergitterungen, Beschlägen, Schlössern, Treppen, Balkons, Fenster-, Garten- und noch andern Geländern, Thoren, u. s. w. *Illus.* Heft 1-3. 4°. *München*, 1844.

Krüger, Julius. Der Apparat des Photographen, Anfertigung, Beurtheilung, Wirkung und Behandlung der Apparate; nebst Unterweisung in der Aufnahme von Personen, Architekturen, Landschaften und Stereoskopen. 8°. *Leipzig*, 1859.

——— Vademecum des practischen Photographen. Nebst einer Einleitung: die Geschichte und Theorie der Photographie vom chemischen Standpunkte; hrsg. von. 8°. *Leipzig*, 1856.

——— and **Spamer,** Otto. Agenda für den praktischen Photographen. 1ster Jahrg. 1-2te Hälfte. 16°. *Leipzig*, 1862.

Krüsi, Hermann. Principles of perspective, practically and geometrically developed, with particular reference to drawing from nature. roy. 8°. *New York*, 1857.

Kubeck, Max. Reiseskizzen aus den Vereinigten Staaten von Nordamerika. 8°. *Wien*, 1872.

Kubel, W. Anleitung zur Untersuchung von Wasser welches zu gewerblichen und häuslichen Zwecken, oder als Trinkwasser benutzt werden soll. 8° *Braunschweig*, 1866.

Kubert, Ferdinand. Analytische Tabelle, mit den natürlichen Farben der Niederschläge. fol. plate. *Berlin.*

Kuder, Salomon. Der praktische Familienfärber. 18°. *Trexlertown, Pa.*, 1858.

Kuhlmann, Friedrich. Anwendung der löslichen kieselsäuren Alkalien zur Härtung poröser Kalksteine. *See* **Fuchs,** J. N. v.

Kühn, Heinrich. Handbuch für Kammmacher, Horn- und Beinarbeiter. *Illus.* 8°. *Weimar*, 1841. **115 Neuer Schauplatz der Künste.**

Kuhn, J. A. Pettenkofer's Regenerations-Verfahren und seine Stellung zur Gemälde-Restauration und Conservirung. 8°. *Braunschweig*, 1864.

Kühner, Raphael. Grammar of the Greek language. Transl. from the German by B. B. Edwards and S. H. Taylor. New ed. rev. 8°. *New York*, 1853.

Kühner, Raphael. Latin grammar with exercises, Latin reader and vocabularies. Translated and remodelled by J. F. Champlin. 12°. *Boston*, 1850.

Kulmer, Rudolf v. Die Kunst des Goldarbeiters, Silberarbeiters und Juweliers. Ein Handbuch der wichtigsten chemischen und mechanischen Arbeits-Operationen, mit Berücksichtigung der Werkzeuge, Maschinen und Apparate. Nebst einem Anhange über Edelsteine und Perlen. *Illus.* Text, 8°; atlas, fol. *Weimar*, 1872. **8 Neuer Schauplatz der Künste.**

Kunst (Die) des Seifensiedens und Lichtziehens. 3te Aufl. *Illus.* 8°. *Weimar*, 1843. **4 Neuer Schauplatz der Künste.**

——— und Gewerbe-Blatt. *See* MUNICH. **Polytechnischer** Verein.

Kunstgewerbliche Musterbilder. *See* **Pfau,** Ludwig.

Kunstler, Gustav. Die unseren Kulturpflanzen schädlichen Insekten. 8°. *Wien*, 1871.

Kuntze, C. Die Orgel und ihr Bau; hrsg. von. *See* **Seidel,** Johann Julius.

Kunz, Otto. A treatise on chemical analysis of minerals. 8°. *Pittsburgh*, 1846.

Kupelweiser, Franz. Hüttenwesen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

Kupffer, Adolph T. von. Handbuch der Alkoholometrie. Anweisung zum Gebrauch der gläsernen und metallenen Alkoholometer und zu ihrer Construction. *Illus.* 8°. *Berlin*, 1865.

Kurrer, Wilhelm Heinrich von. Das Neueste in der Druck- und Färbekunst, als Nachträge zu der Schrift: das Neueste oder die Entdeckungen in dem Gebiete der Druck- und Färbekunst. 8°. *Berlin*, 1862.

Kurten, Philip. The art of manufacturing soaps, with receipts for making transparent and camphine oil candles. 12°. *Philadelphia*, 1854.

Kustel, Guido. A treatise on concentration of all kinds of ores; including the chlorination process for gold bearing sulphurets, arseniurets, and gold and silver ores generally. 8°. *San Francisco*, 1868.

Kyan, John Howard. On the elements of light, and their identity with those of matter, radiant and fixed. roy. 8°. *London*, 1838.

Digitized by Google

KYANIZING, Account of the process of. *See* **Herron, J. Trellis** railway structure.

L., W. B. The corset and the crinoline; a book of modes and costumes from remote periods to the present time. *Illus.* 8°. *London*, 1868.

La Beaumelle, L'Angliviel de. Vie de Maupertuis: ouvrage posthume, suivi de lettres inédites de Frédéric-le-Grand et de Maupertuis. *Paris*, 1856.

La Blanchère, H. de. L'art du photographe, comprenant les procédés complets sur papier et sur glace, négatifs et positifs. 8°. *Paris*, 1859.

——— Monographie du stéréoscope et des épreuves stéréoscopiques. 8°. *Paris*, 1862.

——— Répertoire encyclopédique de photographie, comprenant, par ordre alphabétique, tout ce qui a paru en France et à l'étranger. Partie alphabétique non périodique. T. 1, 2. 8°. *Paris*, [1863].

LABOR. *See, also*, **Political** economy.

——— Der Arbeiterfreund. Zeitschrift für das Wohl der arbeitenden Klassen. *See* **Arbeiterfreund.**

——— and capital. Kapital und Arbeit. *See* **Knight**, Charles.

——— De la liberté du travail. *See* **Dunoyer**, C.

——— Zur Statistik der Arbeiter-Verhältnisse. *See* AUSTRIA. **K. K. Handelsministerium.**

LABORATORY notes. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Laboulaye, Ch. Annales du conservatoire impérial des arts et métiers T. 1–6. 8°. *Paris*, 1861–63.

Laboulaye, Chas. P. L. Complément du dictionnaire des arts et manufactures. 8°. *Paris*, 1861.

——— Encyclopédie technologique; dictionnaire des arts et manufactures, de l'agriculture, des mines, etc. T. 1, A–F. T. 2, G–Z. 8°. *Paris*, 1847. 2d ed., *n. d.*

——— Encyclopédie technologique: dictionnaire des arts et manufactures et de l'agriculture. Description des procédés de l'industrie française et étrangère T. 1, A–D. T. 2, E–M. T. 3, N–Z. T. [4], complément. 4e éd. roy. 8°. *Paris*, 1877. [The first 3 v. are "deuxième tirage", 1877; the 4th, or complément, 1875.]

——— Essai sur l'art industriel, comprenant l'étude des produits les plus célèbres de l'industrie à toutes les époques, et des œuvres les plus remarquées à l'exposition universelle de Londres en 1851, et à l'exposition de Paris en 1855. 8°. *Paris*, 1856.

Laboulaye, Chas. P. L.—Continued.

——— Guide du chauffeur et du propriétaire de machines à vapeur; publ. par. *See* **Grouvelle and Jaunez.**

——— Traité de cinématique ou théorie des mécanismes. 8°. *Paris*, 1861.

LABRADOR peninsula, The. *See* **Hind**, Henry Youle.

Lacan, Ernest. Moniteur de la photographie; red. par. *See* **Moniteur.**

——— Préface biographique et des notes; par. *See* **Niepce de Saint Victor**, C. M. F. **Recherches** photographiques.

——— Traité de l'impression photographique sans sels d'argent; introduite par. *See* **Poitevin**, A.

Lacassagne, J., and **Thiers,** Rodolphe. Nouveau système d'éclairage électrique. 8°. *Paris*, 1857.

LACE. Abridgments English Patents, No. 29.

——— Book of lace work. *See* **Lady's** library.

——— The book of point lace. *See* **Lady's** library.

——— Histoire du tulle et des dentelles. *See* **Ferguson**, S., *fils.*

——— History of. *See* **Palliser**, Fanny B.

Lachapelle, Hermann, and **Glover,** Ch. Handbuch der Fabrikation gashaltiger Getränke vom hygienischen, wissenschaftlichen und industriellen Standpunkt. 8°. *Berlin*, 1869.

Lackland, William. Meteors, aerolites, storms, etc.; transl. by. *See* **Zürcher and Margollé. Illustrated library of wonders, v. 19.**

La Condamine. Relation abrégée d'un voyage fait dans l'intérieur de l'Amérique méridionale, depuis la côte de la mer du sud jusqu'aux côtes du Brésil et de la Guiane, en descendant la rivière des Amazones; lûe à l'assemblée publique de l'Académie des sciences, le 28 avril 1745, par M. de la Condamine, de la même académie. Avec une carte du Maragnon ou de la rivière des Amazones, levée par le même. 16°. *Paris*, 1745.

La Croix, — de. Éclaircissemens sur l'extrait du méchanisme des mouvemens des corps flotans, imprimé dans les Mémoires

Digitized by Google

La Croix, — de—Continued.
des sciences et des beaux arts du mois d'avril 1735. Article 35. 12°. *Paris*, 1736.

La Croix, Paul. Military and religious life in the middle ages and at the period of the renaissance. 8°. *New York*, 1874.

—— and **Seré,** Ferdinand. Histoire de l'orfévrerie joaillierie, et des anciennes communautés et confréries d'orfèvres-joailliers de la France et de la Belg que. roy. 8°. *Paris*, 1850.

La Croix, S. F. Manuel d'arpentage. 5e éd. 18°. *Paris*, 1834. **42 Manuels Roret, T. 1.**

—— Traité élémentaire du calcul des probabilités. 2e éd. 8°. *Paris*, 1822.

Ladies' botany. *See* **Lindley,** John.

—— complete guide to crochet, fancy knitting and needlework. *See* **Stephens,** Ann S.

—— garden companion. *See* **Webster,** W.

Ladurner, P. Justinian. Geschichte des deutschen Ordens in Tirol. *See* TYROL.

Lady's (The) library. Colored illustrations. 5 v. [bound in 1]. obl. 8°. *London*, 1850.

CONTENTS.

v. 1. The book of braiding and embroidery. [?]
2. The book of crochet and lace work.
3. The book of knitted and netted embroidery. [?]
4. The book of papier maché and japanning.
5. The book of point lace and tatting.

Laer, G. van. Recueil des principaux procédés de teintures à mordant, à l'usage des teinturiers. 2e partie. 8°. *Verviers*, 1872.

Lafage, J. Adrien de. Manuel de musique. *See* **Choron,** A. É. **68 Manuels Roret.**

Lafever, Minard. The architectural instructor, containing a history of architecture from the earliest ages to the present time: also the Greek and early Roman classic orders, their principles and beauties; designs of cottages, villas and mansions, with observations on construction; designs of churches, monuments and public buildings; with glossary of architectural terms. *Illus.* 4°. *New York*, 1856.

—— The beauties of modern architecture. *Illus.* 8°. *New York*, 1849.

Laffineur, Jules. Traité de la construction des roues hydrauliques, comprenant tous les systèmes de roues en usage. 16°. *Paris, n. d.*

Lafont, J. B. Angeloy. Treatise on French pronunciation and genders. 24°. *Montreal and Toronto*, 1864.

Lafoy, J. B. The complete coiffeur; or an essay on the art of adorning natural, and of creating artificial beauty. 12°. *New York*, 1817.

La Fueille, Daniel de. Livre nouveau et utile pour toutes sortes d'artistes. sm. 4°. *Amsterdam*, 1697.

La Gardette, C. M. de. Art du plombier et fontainier. PARIS. **Acad. roy. des sc., arts et métiers, v. 7 and 13.**

La Grange, Léon. La peinture et la sculpture au salon de 1861; avec un appendice sur la gravure, la lithographie et la photographie, par Philippe Burty. 8°. *Paris*, 1861.

La Hire, M. de. Traité de mécanique. sm. 4°. *Paris*, 1729.

Laignel, J. B. Chemins de fer. *Paris* 1857. pp. 8. [Lithographed.]

Laing, David. Plans, elevations, and sections of buildings public and private, executed in various parts of England, etc. *Illus.* fol. *London*, 1818. pp. 44.

Laird, John. Steam navigation. Appendices "A" and "B." *See* **Tredgold,** T. **Steam** navigation.

Laird brothers. Correspondence between her majesty's government and Messrs. Laird brothers, respecting the iron clads building at Birkenhead. *See* BIRKENHEAD.

LAKE SUPERIOR. Its physical character, vegetation and animals. *See* **Agassiz,** Louis.

Lakeside annual directory, for 1875–76. *See* CHICAGO.

Lalande, Joseph Jérôme le Français de. L'art de faire le maroquin. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

—— L'art de faire le papier. PARIS. **Acad. des sc., arts et métiers, v. 33 and 4.**

—— L'art de faire le parchemin. PARIS. **Acad. des sc., arts et métiers, v. 33 and 3.**

—— L'art de l'hongroyeur. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

—— L'art de mégissier. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

—— L'art du cartonnier. PARIS. **Acad. des sc., arts et métiers, v. 33 and 4.**

—— L'art du chamoiseur. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

Digitized by Google

Lalande, Joseph Jérôme le Français de. L'art du corroyeur. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

——— L'art du tanneur. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

Lalanne, Ludovic. Recherches sur le feu grégeois, et sur l'introduction de la poudre à canon en Europe. 2e éd. 4°. *Paris*, 1845.

La Marre, — de, and **Duhamel.** Traité des pesches. PARIS. **Acad. des sc., arts et métiers, v. 34–36, and 5, 10, 11.**

La Martillière, *Inspecteur général d'artillerie.* Réflexions sur la fabrication en général des bouches à feu, et observations sur les épreuves extraordinaires et comparatives de différentes espèces de bouches à feu, qui ont eu lieu à Douai en 1786. 2e éd. 8°. *Paris*, 1796.

Lambert, Aylmer Bourke. A description of the genus pinus, with directions relative to the cultivation, and remarks on the uses of the several species: also descriptions of many new species of coniferæ. roy. 8°. *London*, 1832.

Lambert, T. S. Primary systematic human anatomy and hygiene. 12°. *New York*, 1867.

Lambinet, P. Origine de l'imprimerie, d'après les titres authentiques, l'opinion de M. Daunou et celle de M. Van Praet; suivie des établissemens de cet art dans la Belgique et de l'histoire de la stéréotypie. T. 1, 2. 8°. *Paris*, 1810.

Lamborn, Robert H. Metallurgy of silver and lead: a description of the ores; their assay, treatment, and valuable constituents. 5th ed. 16°. *London*, 1870. **Weale's series, No. 134.**

——— A rudimentary treatise on the metallurgy of copper. 12°. *London*, 1860. **Weale's suppl. series, No. 1.**

Lamé, M. G. Leçons sur la théorie mathématique de l'élasticité des corps solides. 8°. *Paris*, 1852.

Lamont, Johann. Denkrede auf die Akademiker Dr. Thaddäus Siber und Dr. Georg Simon Ohm. Im Auszuge vorgetragen in der öffentlichen Sitzung der k. bayerischen Akademie der Wissenschaften zu München zur Feier ihres 96ten Stiftungstages am 28. März 1855. 4°. *München*, 1855. pp. 36.

——— Resultate aus den an der königl. Sternwarte veranstalteten meteorologischen Untersuchungen, nebst Andeutungen über den Einfluss des Clima von München auf die Gesundheits-Verhältnisse der Bewohner. Aus den Abhandlungen der k. bayerischen Akademie der Wissenschaften. 4°. *München*, 1857.

Lamont, Johann—Continued.

——— Untersuchungen über die Richtung und Stärke des Erdmagnetismus an verschiedenen Puncten des südwestlichen Europa. 4°. *München*, 1858.

——— Untersuchungen über die Richtung und Stärke des Erdmagnetismus in Nord-Deutschland, Belgien, Holland, Dänemark im Sommer des Jahres 1858. *Illus.* 4°. *München*, 1859.

LAMPS. Abridgments English Patents, No. 44.

——— and articles of illumination. Lampen und Beleuchtungs-Apparate. Von Carl Cohn. *See* VIENNA. **Gen.-Dir. d Weltausst. 1873. Bericht. Gruppe 7.**

——— Handbuch für Lampenfabrikanten. *See* **Lebrun. 53 Neuer Schauplatz der Künste.**

——— Manuel du lampiste. *See* **Lebrun. 54 Manuels Roret.**

——— Zeitschrift für Lampenfabricanten. *See* **Voigt,** B. F.

Lancet (The). Ed. by Thomas Wakley. 45 v. [2 v. 1850 wanting.] 8° and 4°. *London*, 1823–52.

——— Same. American edition. Ed. by J. Henry Bennet and T. Wakley, jr. 10 v. roy. 8°. *New York*, 1867–76———.

LAND-surveying, A treatise on. *See* **Gillespie,** W. M.

Landauer, J. Die Löthrohranalyse. Anleitung zu qualitativen chemischen Untersuchungen auf trockenem Wege. 16°. *Braunschweig*, 1876.

Landells, E. The boy's own toy-maker. *Illus.* 16°. *New York*, 1865.

LANDING parties. Organization of landing parties for operations on shore. By B. M. T. Mason. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Landrin, M. H. Die Kunst des Messerschmiedes. Frei aus dem Französischen übersetzt von Dr. H. Leng. *Illus.* 8°. *Weimar*, 1836. **85 Neuer Schauplatz der Künste.**

——— Manuel complet du maître de forges. T. 1, 2. *Illus.* 18°. *Paris*, 1829. **38 Manuels Roret.**

Digitized by Google

Landrin, M. H. Manuel du coutelier. *Illus.* 18°. *Paris,* 1835. **52 Manuels Roret.**

——— A treatise on steel, comprising its theory, metallurgy, properties, practical working and use. Transl. from the French by A. A. Fesquet. 12°. *Philadelphia,* 1868.

LANDSCAPE gardening and landscape architecture. *See* **Repton,** H.

——— gardening, Essays on. *See* **Morris,** Richard.

——— ——— Practical. *See* **Kern,** G. M.

——— ——— Rural essays. *See* **Downing,** A. J.

——— ——— Theory and practice of. *See* **Downing,** A. J.

——— ——— The villa gardener. *See* **Loudon,** J. C.

——— painting. *See* **Alston,** J. W.

——— ——— *See* **Burnet,** John.

——— ——— *See* **Rowbotham,** Thomas.

——— ——— in oil colours, The art of. *See* **Art.**

——— ——— in water colors. *See* **Barnard,** George.

——— photography. *See* **Linn,** R. M.

Landseer, John. Lectures on the art of engraving. 8°. *London,* 1807.

Landwirthschaftliche Literatur-Zeitung. Eine Monatsschrift. Von L. H. Fischer, A. G. Schweitzer und M. H. Kittel. 13ter B. 8°. *Frankfurt a. Main,* 1848.

———(Der) Maschinenbauer. Hrsg. von Carl Pflug und J. F. Matthias. B. 1–3. sm. 4°. *Berlin,* 1859-61.

——— Nützliche und schädliche Thiere. [4 large fol. plates.] *Stuttgart. n. t. p.*

Landwirthschaftlichen (Die) Versuchs-Stationen. B. 1–22. 8°. *Dresden,* 1859–77——.

Lang, Oliver. Steam navigation. Appendices "A" and "B." *See* **Tredgold,** T. **Steam** navigation.

Lange, J. C. E., and **Stegemann,** M. Beschreibung der Zeichnungen landwirthschaftlicher Maschinen; hrsg. von. 8°; pl., fol. *Hannover,* 1857.

Langenheim, F. Photographic views at home and abroad. 4°. *Philadelphia,* 1856.

Langethal, —. Encyklopädie der Landwirthschaft; bearbeitet von. *See* **Schnee,** G. H.

Langethal, Chr. Ed. Lehrbuch der landwirthschaftlichen Pflanzenkunde 3 Bde. 8°. *Jena,* 1847.

Langl, J. Zeichnen-Unterricht. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Langley, Batty. Practical geometry, applied to the useful arts of building, surveying, gardening and mensuration, calculated for the service of gentlemen as well as artisans, and set to view in four parts. fol. *London,* 1726.

Langlois-Longueville, F. P. Manuel du lavis à la sépia et de l'aquarelle. *See* **Constant-Viguier,** S. F. **91 Manuels Roret.**

Langstroth, L. L. The hive and the honey-bee; a bee keeper's manual. 12°. *Northampton,* 1853.

——— Same. 3d ed. with introduction by Rev. Robert Baird. *Illus. New York,* 1863.

Langstroth, L. L., Directions for using the movable combs of. *See* **Quimby,** M.

LANGUAGE, The album of. *See* **Naphegyi,** G.

——— and the study of language. *See* **Whitney,** William Dwight.

——— An essay on. *See* **Welsford,** Henry.

——— The life and growth of. *See* **Whitney,** W. D. **International scientific series, v. 16.**

——— Minshaei emendatio. *See* **Minshaeus,** Joannes.

——— Origin, history and connection of the languages of western Asia and Europe, and principles on which languages are formed. *See* **Webster,** N. **Dict.** Engl. language.

——— Science of. *See* **Müller,** M.

——— Tijdschrift voor Indische taal-, land- en volkenkunde. *See* BATAVIA (*East India*).

LANGUAGES. Method of teaching and studying the belles-lettres, etc. *See* **Rollin,** Charles.

——— of southern Europe, Analogy of. *See* **Manget,** V. H.

——— The study of. *See* **Marcel,** C.

La Nicca, J. Rules for calculating the change wheels for screws in a turning lathe. *See* **Campin,** F.

Lankester, Edwin. Quarterly journal of microscopical science; ed. by. *See* **Quarterly** journal.

——— The uses of animals in relation to the industry of man. 2 v. 12°. *London,* 1860.

——— and **Lankester,** E. Ray. *See* **Quarterly** journal of microscopical science, new series.

Digitized by Google

Lanman, Charles. Dictionary of the United States congress: a manual of reference for the legislator and statesman. 8°. *Washington*, 1864. 5th ed., *Hartford*, 1868.

Lanta, A. de Barthélemy. Littérature et beaux-arts. *See* **Écho** de la littérature.

Lanz and **Bétancourt.** Analytical essay on the construction of machines. 4°; pl., fol. *London*, 1820.

——— ——— Essai sur la composition des machines. 3e éd. Texte, 4°; pl., sm. fol. *Paris*, 1840.

Lapham, J. A. Antiquities of Wisconsin. **Smiths'n contrib., v. 7.**

LAPIDARY. Erfahrungen Edelsteine zu schleifen. *See* **Könneritz,** L. von. **114 Neuer Schauplatz der Künste.**

Laplace, Pierre Simon de. Biography. *See* **Arago,** D. F. J. Biography of scientific men.

LA PLATA. The Argentine confederation and Paraguay. *See* **Page,** Thomas J.

Lardner, Dionysius. The cabinet cyclopædia. Conducted by Dionysius Lardner, assisted by eminent literary and scientific men. 132 v. 16°. *London*, 1833–35.

CONTENTS.

v. 1. Outlines of history. By T. Keightley.
2. Chronology of history. By Sir N. H. Nicolas.
3–12. History of England. By Sir J. Mackintosh, W. Wallace, and R. Bell. v. i–x.
13–14. History of Scotland. By Sir W. Scott.
15–18. History of Ireland. By T. Moore. v. i–iii.
19–21. History of France. By E. E. Crowe. v. i–iii.
22. History of Switzerland.
23–27. History of Spain and Portugal. By S. A. Dunham. v. i–iv.
28–30. History of the German empire. By S. A. Dunham. v. i–iii.
31–32. History of the United States. By H. Fergus. v. i–ii.
33–40. History of Greece. By C. Thirlwall. v. i–viii.
41–42. History of Rome. v. i–ii.
43–44. History of the fall of the Roman empire. By J. C. L. Simonde de Sismonde. v. i–ii.
45–46. Arts, manufactures, manners and institutions of the Greeks and Romans. By T. D. Fosbrooke. v. i–ii. [2 copies.]
47. History of the Italian republics. By J. C. L. Simonde de Sismondi.
48–51. History of Europe during the middle ages. By S. A. Dunham. v. i–iv.
52–54. History of Russia. By R. Bell. v. i–iii.

Lardner, Dionysius—Continued.

55. History of the Netherlands. By T. C. Grattan.
56. History of Poland. By S. A. Dunham.
57–59. History of Denmark, Sweden, and Norway. By S. A. Dunham. v. i–iii.
60–62. History of maritime and inland discovery. By W. D. Cooley. v. i–iii.
*63–64. History of the Christian church. By Henry Stebbing. v. i–ii. [?]
65–66. History of the reformation. By H. Stebbing. v. i–ii.
67–69. Lives of British military commanders. By G. R. Gleig. v. i–iii.
70–74. Lives of British admirals. By R. Southey and R. Bell. v. i–v.
75. Lives of British lawyers. By H. Roscoe.
76–82. Lives of British statesmen. By Sir J. Mackintosh, J. Foster, and T. P. Courtenay. v. i–vii.
83–87. Lives of foreign statesmen. By G. P. R. James and E. E. Crowe. v. i–v.
88–90. Lives of literary and scientific men of Italy, Spain and Portugal. By M. W. Shelley, D. Brewster, J. Montgomery, and others. v. i–iii.
91–92. Lives of literary and scientific men of France. By M. W. Shelley. v. i–ii.
93–94. Lives of English poets. By R. Bell. v. i–ii.
95. Lives of early English writers. By S. A. Dunham and R. Bell.
96–97. Lives of British dramatists. By S. A. Dunham, R. Bell and others. v. i–ii.
98. Study of natural philosophy. By Sir J. F. W. Herschel.
*99. History of natural philosophy. By Powell. [?]
*100. Chemistry. By M. Donovan. [?]
*101. Geometry. By D. Lardner. [?]
102. Mechanics. By H. Kater and D. Lardner. [2 copies.]
103. Hydrostatics and pneumatics. By D. Lardner.
104. Astronomy. By Sir J. F. W. Herschel.
105. Optics. By Sir D. Brewster.
106. Heat. By D. Lardner.
*107.
108–109. Electricity, magnetism and meteorology. By D. Lardner and C. V. Walker. v. i–ii.
110. Probabilities. By A. De Morgan.
111. Study of natural history. By W. Swainson.
112. Geography and classification of animals. By W. Swainson.
113. Natural history and classification of quadrupeds. By W. Swainson.
114. Animals in menageries. By W. Swainson.
115–116. Natural history and classification of birds. By W. Swainson. v. i–ii.
117–118. Natural history of fishes, amphibians and reptiles. By W. Swainson. v. i–ii.
*119. Natural history of insects. By W. Swainson. [?]

Digitized by Google

Lardner, Dionysius—Continued.

*120. Shells and shell fish. By W. Swainson. [†]
121. Habits and instincts of animals. By W. Swainson.
122. Taxidermy and biography of zoologists. By W. Swainson.
123. Botany. By J. S. Henslow.
124–125. Geology. By J. Phillips. v. i–ii.
126–127. Domestic economy. By M. Donovan. v. i–ii.
128. Manufacture of silk. By G. R. Porter.
129–131. Manufacture in metals. By J. Holland. v. i–ii.
132. Manufacture in porcelain and glass. By G. R. Porter.
*133. Treatise on arithmetic. [†] By D. Lardner.

——— The electric telegraph. New edition; rev. and rewritten by E. Bright. *Illus.* 8°. *London*, 1867.

——— An elementary treatise on the differential and integral calculus. roy. 8°. *London*, 1825.

——— Hand-books of natural philosophy and astronomy. First course: mechanics, hydrostatics, hydraulics, pneumatics, sound, and optics. 8°. *Philadelphia*, 1851.

——— ——— Second course: heat, magnetism, common electricity, voltaic electricity. 12°. *Philadelphia*, 1853.

——— ——— Third course: meteorology, and astronomy. *Illus.* 12°. *Philadelphia*, 1854.

——— Manuel complet du travail des métaux. Traduit de l'anglais par A. D. Vergnaud. T. 1–2. *Illus.* 18°. *Paris*, 1835. **46 Manuels Roret.**

——— Manuel du fondeur: les fonderies. *See* **Launay,** J. B. **39 Manuels Roret.**

——— A popular account of Newton's Optics. 8°. *London, n. d.* [Bound in a vol. entitled "Tracts".]

——— Popular lectures on science and art, delivered in the principal cities and towns of the United States. 2 v. 8°. *New York*, 1846.

——— Populäre Lehre von den elektrischen Telegraphen. *Illus.* 8°. *Weimar*, 1856. **228 Neuer Schauplatz der Künste.**

——— Railway economy: a treatise on the new art of transport; its management, prospects, and relations, commercial, financial and social; with an exposition of the practical results of the railways in operation in the United kingdom, on the continent and in America. 12°. *London*, 1850.

Lardner, Dionysius. The steam engine, with an historical sketch of its invention and progressive improvement; its application to navigation and railways. Additions by J. Renwick. 3d Amer. from 5th London ed. *Illus.* 8°. *Philadelphia*, 1836.

——— A treatise on heat. 16°. *London*, 1853. [2 copies.] **Lardner's cabinet cyclopædia, v. 106.**

——— A treatise on hydrostatics and pneumatics. 16°. *London*, 1831. **Lardner's cabinet cyclopædia, v. 103.**

——— A treatise on mechanics. *See* **Kater,** H., and **Lardner,** D. **Lardner's cabinet cyclopædia, v. 102.**

——— Treatise on Newton's Optics. LONDON. **Society of useful knowledge, v. 2.**

——— Treatise on pneumatics. LONDON. **Society of useful knowledge, v. 1.**

——— Treatises on mechanics. LONDON. **Society of useful knowledge, v. 1.**

——— and **Walker,** Charles V. A manual of electricity, magnetism and meteorology. 2 v. 8°. *London*, [1833]. **Lardcabinet cyclopædia, v. 108 and 109.**

La Reynière, — de. Menus, prescriptions, etc. *See* **Dictionnaire** général de la cuisine française.

La Rive, Auguste de. A treatise on electricity in theory and practice. Transl. for the author by C. V. Walker. v. 1–3. 8°. *London*, 1853–58.

Larkin, James. The practical brass and iron founder's guide: a concise treatise on the art of brass founding, moulding, etc. With rules, tables and receipts for gold, silver, tin, and copper founding; plumbers, bronze and bell founders, jewellers, etc. 12°. *Philadelphia*, 1853. 2d ed., 1863. 5th ed., 1866.

La Roche, R. Pneumonia; its supposed connection pathological and etiological with autumnal fevers, etc.; including an inquiry into the existence and morbid agency of malaria. 8°. *Philadelphia*, 1854.

Larrowe, Albertus, Argument of counsel in the appeal of, from the decision of W. D. Bishop. *See* **Dodge,** T. H.

LARYNGOSCOPE. Laryngoskopie und Rhinoskopie. Von L. Schrötter. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 14.**

——— The use of the, in diseases of the throat. *See* **Mackenzie,** Morell.

Digitized by Google

LARYNX, Chronic diseases of. *See* **Tobold**, Adelbert.

Lasalle, R. de. Die Oelmalerei; nach. *See* **Hertel**, A. W. **235 Neuer Schauplatz der Künste.**

La Sor, *Comte* de, and **Texier.** Traité complet et pratique de photographie. 12°. *Paris*, 1854.

Lasteyrie-Dusaillant, Charles Philibert de. Concours pour les machines hydrauliques, etc.; rapport par. *See* **Challan**, A. D. J. B., and others.

——— Journal des connaissances usuelles et pratiques; publié par. *See* **Journal** des connaissances.

——— A treatise on the culture, preparation, history, and analysis of pas el or wood. Transl. by H. A. S. Dearborn. 18°. *Boston*, 1816.

LASTS, Treatise on. *See* **Boot** and shoe maker's assistant.

Latham, Baldwin. Sanitary engineering; a guide to the construction of works of sewerage and house drainage, with tables. 8°. *London*, 1873.

Latham, John Herbert. The construction of wrought iron bridges, embracing the application of the principles of mechanics to wrought iron girder work. *Illus.* 8°. *Cambridge*, [*Eng.*], 1858.

Latham, Robert Gordon. Elements of comparative philology. 8°. *London*, 1862.

——— A hand-book of the English language. 12°. *New York*, 1866.

——— Varieties of the human race. *See* **Bushnan**, J. S., and others. **Orr's circle of the sciences, v. 1.**

——— and **Forbes**, Edward. The natural history department of the Crystal palace described; ethnology, by R. G. Latham; zoology and botany, by Edward Forbes. 8°. *London*, 1854. **Crystal palace library, v. 3.**

Lathe (The) and its uses; or instruction in the art of turning wood and metal; including the modern appliances for the ornamentation of plane and curved surfaces. 2d ed. 8°. *London*, 1869.

——— Calculating change wheels for the slide lathe. *See* **Ormsby**, E. S.

——— Rules for calculating the change wheels for screws on a. By J. La Nicca. *See* **Campin**, F.

LATHES and turning. *See* **Northcott**, W. Henry.

Latilla, Eugenio. A treatise on fresco, encaustic and tempera painting. 8°. *London*, 1842.

LATIN-English lexicon. *See* **Andrews**, E. A.

——— ——— ——— *See* **Riddle**, Joseph E.

——— grammar. *See* **Bullions**, Peter.

——— ——— Adam's. *See* **Gould**, Benjamin A. [†]

——— language, A grammar of the. *See* **Andrews**, E. A., and **Stoddard**, S.

——— lessons. *See* **Allen**, William F., and **Joseph**, H.

——— synonymes. *See* **Döderlein**, Ludwig.

——— writers on agriculture. *See* **Scriptores** rei rusticæ veteres Latini.

Latreille, Édouard de. Répertoire général de photographie. 18°. *Paris*, 1858. **115 Manuels Roret.**

Latrobe, Benjamin H. Construction of railroads. *See* **Knight**, J.

——— Remarks upon the defects of railway tracks, and their remedy, by the adoption of a new form of railway bar. 8°. *Baltimore*, 1850. pp. 18.

Laudier, —, and **D**, M. Nouveau manuel complet des marchands de vins, des débitants de boissons et du jaugeage. *Illus.* 18°. *Paris*, 1836. **70 Manuels Roret.**

Lauer, Johann. Geniewesen. Sprengtecknik. VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 16.**

——— Mauerwerks-Sprengungen mit Dynamit und Pulver. *Illus.* 8°. *Wien*, 1873.

——— Spreng- und Zündversuche, mit Dynamit und comprimirter Schiessbaumwolle. 8°. *Wien*, 1872.

LAUGHING gas. Researches on nitrous oxide. *See* **Ziegler**, Geo. J.

Launay, J. B. Manuel complet du fondeur en tous genres: avec la traduction de l'ouvrage anglais sur les fonderies du docteur Lardner, par A. D. Vergnaud. T. 1, 2. 18°. 2e éd. *Paris*, 1836. **39 Manuels Roret.**

LAUREL HILL cemetery, Illustrated guide to. *See* **Smith**, R. A.

Laurencin, Paul. Le télégraphe terrestre sous-marin pneumatique. Histoire, principes, mécanismes, applications, règlements, tarifs, etc. *Illus.* 16°. *Paris*, 1877.

Laurent, A. Die Photographie in einer Nuss. Ins Deutsche übertragen. Von C. H. Schmidt. 2te Aufl. 8°. *Weimar*, 1860.

Digitized by Google

Laurent, Auguste. Chemical method, notation, classification and nomenclature. Transl. by William Odling. 8°. *London*, 1855. **Cavendish society publications.**

Laurent, Ch. Guide du sondeur. *See* **Degousée,** J., and **Laurent,** Ch.

Lausitz. Geognostische Beschreibung der preussischen Oberlausitz. *See* **Glocker,** E. F.

Lavalette, Adrien de. Écho de la littérature. *See* **Écho** de la littérature.

——— Écho du monde savant; 7e et 10e année, publ. par. *See* **Écho** du monde.

Lavallée, —. Vue des monumens français, etc. *See* **Réville, Lavallée,** and **Roquefort,** B. de.

Lavoisier, —. Elements of chemistry in a new systematic order, containing all the modern discoveries. Transl. from the French by Robert Kerr. 3d ed. 8°. *Edinburgh*, 1796.

Law, Henry. The elements of Euclid; with many additional propositions and explanatory notes. Part I. Containing the first three books. 12°. *London*, 1853. **Weale's series, No. 88.**

——— Memoir of the Thames tunnel. **Weale's papers on engineering, v. 3, 5.**

——— A rudimentary treatise on logarithms. 12°. *London*, 1851. **Weale's series, Nos. 94, 95.**

——— Rudiments of the art of constructing and repairing common roads; to which is prefixed a general survey of the principal metropolitan roads. By S. Hughes. 12°. *London*, 1850. **Weale's series, No. 46.**

——— The rudiments of civil engineering. Part 1, 2; v. 3, pt. 1, 2. 4 v. 12°. *London*, 1852. **Weale's series, Nos. 13, 14, 15, 15*.**

Law, Stephen Dodd. Copyright and patent laws of the United States, 1790 to 1866. With notes of judicial decisions thereunder; and forms and indexes. 12°. *New York*, 1866. [2 copies.]

——— Digest of American cases relating to patents for inventions and copyrights, from 1789 to 1862, including numerous manuscript cases, decisions on appeals from the commissioners of patents, and the opinions of the attorneys general of the United States, under the patent and copy-right laws; and embracing also the

Law, Stephen Dodd—Continued.

American cases in respect to trade-marks. 8°. *New York*, 1862. [5 copies.] *Also*, rev. ed., 1870.

——— Statute laws of the United States of America relating to copyright and patents for inventions from 1790 to 1862. With notes and references. 8°. *New York*, 1863.

LAW. *See, also,* **Law library catalogue,** appendix "A."

——— dictionary. *See* **Bouvier,** J.

——— Elements of the law. *See* **Smith,** Thomas L.

——— Introduction to legal science. *See* **Jones,** Silas.

——— Legal advice to business men. *See* **Fox,** Charles.

——— lexicon. *See* **Wharton,** J. J. S.

——— Manuel du practicien. *See* **D., M. 1 Manuels Roret.**

——— of evidence. *See* **Greenleaf,** Simon.

——— of patents. *See* **Curtis,** George Ticknor.

——— of patents in England and the colonies. *See* **Agnew,** William Fischer.

——— L'origine des lois chez les anciens. *See* **Goguet,** A. Y.

——— Questions and answers on. *See* **Kinne,** Asa.

——— register and official directory, United States *See* **Livingston,** J.

——— (The) reporter. v. 2, No. 5, Sept., 1839. Contents: Prussian law of copyright of 1837, etc. 8°. *Boston*, 1869. [pp. 129–160.]

——— The science of. *See* **Amos,** Sheldon. **International scientific series, v. 10.**

——— Telegraphic decisions and laws. *See* **Turnbull,** L.

Lawes, J. B., and **Gilbert,** J. H. Experiments on the feeding of animals. *See* **Rothamsted** memoirs.

——— ——— On the composition, value and utilization of town sewage. 8°. *London*, 1866.

Lawrence, De Witt Clinton. Report in the matter of the application of W. Wickersham for a patent for sewing machines. *See* **Little,** A. B.

——— and **Fenwick,** Robert W. Argument in opposition to the extension of the patent granted Cyrus H. McCormick, October 23d, 1847, for improvement in reaping machines. Extension refused. 8°. *Washington*, 1861. pp. 12.

Digitized by Google

Lawrence, George N. Sumichrast's birds of southwestern Mexico; prepared by. UNITED STATES. **Interior dept. Nat. museum. Bulletin 4.**

Lawrence, W. A treatise on the diseases of the eye. Ed. by J. Hays. roy. 8°. *Philadelphia*, 1854.

LAWS of Norway. Kong Christian den fjerdes norske Lovbog af 1604. *See* NORWAY.

——— Organic laws or the laws which govern the human organism. *See* **Sax,** J. Bradford.

LAWYER in the school-room, The. *See* **Walsh,** M. McN.

LAWYERS, Lives of British. *See* **Roscoe,** H. **Lardner's cabinet cyclopædia, v. 75.**

LAY sermons. *See* **Huxley,** Thomas Henry.

Layard, Austen Henry. The Nineveh court in the Crystal palace. 8°. *London*, 1854. **Crystal palace library, v. 1.**

Lea, Henry C. Superstition and force; essays on the Wager of law—the Wager of battle—the Ordeal and Torture. 8°. *Philadelphia*, 1866.

Lea, Isaac. List of shells of North America. **Smiths'n misc. coll., v. 2.**

Lea, M. Carey. A manual of photography. 8°. *Philadelphia*, 1868. *Also*, 2d ed., 1871.

——— Photographic mosaics; an annual record of photographic progress. Edited by M. Carey Lea and Edward L. Wilson. 12°. *Philadelphia*, 1869.

Leach, F. S. Handbook of fresh water aquaria; ed. by. *See* **Bishop,** James, and others.

LEAD diseases. *See* **Tanquerel des Planches,** L.

——— Handbuch der Bleiweiss- und Bleizuckerfabrication. *See* **Ludowig,** H.

——— Die Metallurgie des Bleies. *See* **Percy,** John.

——— The metallurgy of; embracing desilveration and cupellation. *See* **Percy,** John.

——— plating. Die Kunst des Vergoldens, Verbleiens, etc. *See* **Schmidt,** Christian Heinrich. **133 Neuer Schauplatz der Künste.**

Lead pipe for distribution of water for the supply of cities. Reports and opinions of chemists. 8°. *New York*, 1859. [†]

Leadbetter, Chas. The royal gauger: or gauging made perfectly easy. 8°. *London*, 1755.

LEARNED men. Begriff und Stellung des Gelehrten. *See* **Thiersch,** F. von.

LEARNING to spell, to read, to write, and to compose. *See* **Jacobs,** J. A.

LEAST squares, Method of. *See* **Chauvenet,** William.

LEATHER. Abridgments English Patents, No. 55.

——— L'art de travailler les cuirs dorés ou argentés. Par A. D. Fougeroux de Bondaroy. PARIS. **Acad. des sc., arts et métiers, v 38 and 3.**

——— L'art du mégissier. Par J. J. Le F. de Lalande. PARIS. **Acad. des sc., arts et métiers, v. 38 and 3.**

——— Art of dressing. *See* **Julia de Fontenelle,** J. S. E., and **Malepeyre,** F.

——— covered and lined, etc. *See* Wiener & co.

——— Fabrication der Portefeuilles, Etuis und Ledergalanteriewaaren. *See* **Kirsch,** A. **202 Neuer Schauplatz der Künste.**

——— Fabrikation des Lohgaren Leders in Deutschland. *See* **Günther,** F. A. **282 Neuer Schauplatz der Künste.**

——— Handbuch der Kunst das Handschuhleder zu gerben und zu färben. *See* **Vollständiges. 84 Neuer Schauplatz der Künste.**

——— Handbuch der Weissgerberei. *See* **Schmidt,** C. H. **217 Neuer Schauplatz der Künste.**

——— Die Herstellung der Leder in ihren chemischen und physikalischen Vorgängen. *See* **Lietzmann,** J. C. H.

——— Leder. Von S. Goldschmidt. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 6.**

——— Die Lederfärbekunst. *See* **Schmidt,** C. H. **111 Neuer Schauplatz der Künste.**

——— Lederwaaren. Von Hermann Lichnovsky. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 6.**

——— Manuel du corroyeur. *See* **Chicoineau,** *Mme.* **118 Manuels Roret.**

——— Tanning, currying, and leather dressing. *See* **Dussauce,** H.

Leavitt, T. H. Facts about peat as an article of fuel: with remarks upon its

Digitized by Google

Leavitt, T. H.—Continued.
origin and composition, the localities in which it is found, the methods of preparation and manufacture, etc. 3d ed. 12°. *Boston*, 1867.

Lebas, M. A. L'obélisque de Luxor. Histoire de sa translation à Paris. *Illus.* fol. *Paris*, 1839.

Lebeaud. Manuel complet du vétérinaire; suivi de l'art de l'équitation. 3e éd. *Illus.* 18°. *Paris*, 1833. **73 Manuels Roret.**

—— and **Julia de Fontenelle,** J. S. E. Manuel complet, théorique et pratique, du distillateur et du liquoriste. 4e éd. *Illus.* 18°. *Paris*, 1835. **81 Manuels Roret.**

Leblanc, —. Manuel du pâtissier; refondu par. *See* **Manuel** du pâtissier. **89 Manuels Roret.**

Le Blanc, —. Der Maschinenbauer, oder Atlas und Beschreibung der Maschinen-Elemente. Nachgelassenes Werk des Professors Le Blanc. Nach dessen Tode durchgesehen, verbessert und vermehrt von dem Ingenieur Felix Tourneux. Deutsch bearbeitet von Dr. Carl Hartmann. 4 Bde. *Illus.* 8°. *Weimar*, 1846-52. **143-145 and 196 Neuer Schauplatz der Künste.**

—— and **Armengaud.** The engineer and machinist's drawing book, on the basis of the works of. *Illus.* 4°. *Glasgow*, 1855.

Leblanc, V., and **Preaux-Callot.** Manuel du bonnetier et du fabricant de bas *Illus.* 18°. *Paris*, 1830. **98 Manuels Roret.**

Lebossu, —. Manuel du toiseur en bâtimens. 1e et 2e partie. *Illus.* 18°. *Paris*, 1832. **41 Manuels Roret.**

Lebrun, —. Handbuch des Riemers und Sattlers: nach dem Französischen des. *See* **Cilliax,** J. C. **64 Neuer Schauplatz der Künste.**

—— Handbuch des Wagners und Chaisenfabrikanten, nach. *See* **Beckmann,** L. **65 Neuer Schauplatz der Künste.**

—— Manuel complet du bourrelier et du sellier, suivi d'un vocabulaire des termes techniques. *Illus.* 18°. *Paris*, 1833. **61 Manuels Roret.**

—— Manuel complet du mouleur. Rev. par Frédéric Dénian. 18°. *Paris*, 1829. **22 Manuels Roret.**

Lebrun, —. Manuel du cartonnier, du cartier et du fabricant de cartonnages. *Illus.* 18°. *Paris*, 1830. **85 Manuels Roret.**

—— Manuel du charron et du carrossier, avec un vocabulaire explicatif des termes techniques. T. 1, 2. 24°. *Paris*, 1833. **33 Manuels Roret.**

—— Manuel du ferblantier et du lampiste, suivi d'un vocabulaire des termes techniques. *Illus.* 18°. *Paris*, 1830. **54 Manuels Roret.**

—— Vollständiges Handbuch für Klempner und Lampenfabrikanten. Nach dem Französischen bearbeitet von D. H. Leng. Dritte vermehrte Auflage von C. H. Schmidt. *Illus.* 8°. *Weimar*, 1843. **53 Neuer Schauplatz der Künste.**

Lecciones de aritmética elemental. Traducido por H. Bartels. 24°. *New York*, 1856.

Le Chatelier, Louis. Chemins de fer d'Allemagne, description statistique, système d'exécution, tracé, voie de fer, stations, matériel, frais d'établissement, exploitation, produits de l'exploitation. 8°. *Paris*, 1845.

—— Locomotiven-Führer. *See* **Flachat,** E., **Petiet,** J., and others. **127, 192 Neuer Schauplatz der Künste.**

—— and **Gouin,** —. Experiments on locomotive engines. *See* **Weale's papers on engineering, v. 6.**

Lechner, Rudolf, and others. Allgemeine Bildungsmittel. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 26.**

Leclerc, J., and **Toussaint,** J. Traité pratique d'arpentage et de nivellement à l'usage des agriculteurs. 12°. *Bruxelles*, 1855. **Bibliothèque rurale, 2e série, No. 14.**

Leclerc, J. M. J. Traité de drainage, ou essai théorique et pratique sur l'assainissement des terres humides. 12°. *Bruxelles*, 1855.

LeConte, John L. Class of North American coleoptera. **Smiths'n misc. coll., v. 3.**

—— Coleoptera of Kansas and eastern New Mexico. **Smiths'n contrib., v. 11.**

—— Entomology of North America; ed. by. *See* **Say,** T.

LECTURE notes for chemical students. *See* **Frankland,** Edward.

LECTURES on physical science. *See* **Tait,** P. G.

Digitized by Google

LECTURES on science and art. *See* **Lardner**, Dionysius.

——— on scientific subjects. *See* **Herschel**, John F. W.

——— on the results of the exhibition, delivered before the Society of arts, manufactures and commerce, at the suggestion of H. R. H. Prince Albert, president of the society. 12°. *London and Philadelphia*, 1852.

CONTENTS.

Lecture 1. The general bearing of the great exhibition on the progress of art and science. By William Whewell.
2. Mining, quarrying, and metallurgical processes and products. By Sir Henry T. De La Beche.
3. On the raw materials from the animal kingdom. By Richard Owen
4. Chemical and pharmaceutical processes and products. By Jacob Bell.
5. The chemical principles involved in the manufactures of the exhibition as indicating the necessity of industrial instruction. By Lyon Playfair.
6. Substances used as food, illustrated by the great exhibition. By John Lindley.
7. Vegetable substances used in the arts and manufactures, in relation to commerce generally. By Edward Solly.
8. Machines and tools for working in metal, wood, and other materials. By Robert Willis.
9. Philosophical instruments and processes, as represented in the great exhibition. By James Glaisher.
10. Civil engineering and machinery generally. By Henry Hensman.
11. The arts and manufactures of India. By J. F. Royle.
12. The progress of naval architecture as indicating the necessity for scientific education, and for the classification of ships and of steam engines; also on life boats. By Capt. Washington.

——— Six, on the uses of the lungs, etc. *See* **Fitch**, Samuel Sheldon.

Ledebur, A. Das Roheisen in Bezug auf seine Verwendung zur Eisengiesserei für Fabrikanten, Giessereibeamte, Formermeister, u. s. w. 8°. *Leipzig*, 1872.

Ledermuller, Martin Frobène. Amusement microscopique, tant pour l'esprit, que pour les yeux, contenant cinquante estampes dessinées d'après nature et enluminées avec leurs explications. T. 1-3. 4°. *Nuremberg*, 1754-68.

Ledieu, A. Traité élémentaire des appareils à vapeur de navigation, etc. T. 1-3. With atlas. 8°. *Paris*, 1862.

Lee, Charles A. Human physiology. 11th ed. 12°. *Auburn, N. Y.*, 1847.

Lee, Samuel Phillips. Reports and charts of the cruise of the United States brig Dolphin, made under the direction of the department. 8°. *Washington*, 1854. [†]

Lee, Thomas J. Tables and formulæ; compiled by. *See* UNITED STATES. **War dept.**

Leech, Daniel D. List of post offices in the United States, with the names of postmasters, on the 13th of July, 1857; also the regulations and laws of the post office department. 8°. *Washington*, 1857.

——— Same. *New York*, 1856. *Washington*, 1859.

LEECHES. Production des sangsues. *See* **Jourdier**, A.

Leeds, Lewis W. Lectures on ventilation. 8°. *New York*, 1868.

Leeds, W. H. Public buildings of London; ed. by. *See* **Pugin**, A., and **Britton**, J.

——— Rudimentary architecture: the orders, and their æsthetic principles. 3d ed. 12°. *London*, 1854. **Weale's series, No. 16.**

LEEDS. Geological and polytechnic society of the West riding of Yorkshire. Proceedings, April 29, 1870. 8°. *Leeds*, 1871.

——— philosophical and literary society. Reports of the council for 1870-74. 8°. *Leeds*, 1871-74.

Lefebvre, C. Annuaire de la photographie; continué par. *See* **Delestre**, J. B.

Lefort, M. J. Chimie des couleurs, pour la peinture à l'eau et à l'huile. 12°. *Paris*, 1855.

Lefoulon, J. A new treatise on the theory and practice of dental surgery. Transl. from the French by T. E. Bond. 8°. *Baltimore*, 1844. **American library of dental science, v. 5.**

Lefroy, Thomas E. P. Cases relating to railways and canals. *See* **Nicoll**, T. J., and others.

Leger, Theodore. Animal magnetism, or psycodunamy. 8°. *New York*, 1846.

LEGERDEMAIN. Les tricheries des Grecs dévoilées. *See* **Houdin**, Robert.

——— or hocus pocus, The whole art of. *See* **Dean**, H.

Digitized by Google

LEGERDEMAIN, The whole art of. *See* **Katterfelto** and others.

Le Gray, Gustave. Photographic manipulation. The waxed paper process of G. Le Gray. Transl. from the French. 12°. *London*, 1853. pp. 34.

——— Photographie. Traité nouveau théorique et pratique des procédés et manipulations, sur papier sec, humide, et sur verre au collodion, à l'albumine. 8°. *Paris, n. d.*

——— Treatise on photography. *See* **Croucher**, J. H.

Le Grice, R. Erfahrungen auf dem Gebiete der practischen Photographie. 8°. *Aachen*, 1857.

Legros, —. Le soleil de la photographie. 8°. *Paris, n. d.*

Lehardy de Beaulieu, *Amiral* de. Notice sur un système de ponts en fonte à tablier suspendu, proposé avec de nouveaux perfectionnements. 8°. *Bruxelles*, 1845. pp. 16.

Lehmann, Karl Gotthelf. Atlas of physiological chemistry. *See* **Funke**, O. **Cavendish society publications.**

——— Manual of physiological chemistry. Translated from the German, with notes, etc., by Chester Morris, with an essay on vital force by Samuel Jackson. 8°. *Philadelphia*, 1856.

——— Physiological chemistry. Transl. from the German by George E. Day. v. 1–3. 8°. *London*, 1851–54.

Leibenfrost, Franz. Der Wein. *See* VIENNA. **Gen.-Dir. d. Weltaust. 1873. Bericht. Gruppe 14.**

Leidy, Joseph. Ancient fauna of Nebraska. **Smiths'n contrib., v. 6.**

——— Flora and fauna within living animals; also extinct species of fossil ox. **Smiths'n contrib., v. 5.**

——— Memoranda on the extinct sloth tribe of North America. **Smiths'n contrib., v. 7.**

LEIPSIC. Archiv der deutschen Landwirthschaft, 1848. Von Moritz Beyer. 8°. *Leipzig*, 1848.

——— Central-Verein in Preussen für das Wohl der arbeitenden Klassen. Zeitschrift. Von Guido Weiss. B. 1–3, 1859–64. 8°. *Leipzig*, 1859–64.

——— Die deutsche Industrie-Ausstellung in der Central-Halle zu Leipzig. Nebst einem nach Fächern und Ländern geordneten Verzeichniss der Aussteller und ihrer Erzeugnisse. Von Friedrich Georg Wieck. *Illus.* 4°. *Leipzig*, 1850.

——— Handels-Kammer zu Leipzig. Jahresberichte 1859–70. 8°. *Leipzig*, 1872.

——— Polytechnische Centralhalle. Zeitschrift für Techniker, Künstler, Fabrikanten und Gewerbtreibende. Von Dr. Kerndt. Jahrg. 1851, '52, '55, '56. 8°. *Leipzig*, 1851–56.

——— Polytechnische Gesellschaft. Berichte 5–14, 1857–65. 8°. *Leipzig*, 1857–65.

——— Verein deutscher Eisenbahn-Verwaltungen. Zeitung. Jahrg. 1861–76. 4°. *Leipzig*, 1861–76. [Jahrg. 1866, 1870, 1871, imperfect.]

Leipziger Handels-Zeitung. Redigirt von Carl Junghanns. 1–4. Jahrg., 1844–47. 4°. *Leipzig*, 1844–47.

Leischner, Carl Ferdinand. Die vollkommene Linirkunst; bearbeitet von. *See* **Vollkommene. 41 Neuer Schauplatz der Künste.**

Leischner, Carl Friedrich. Anleitung zur Verfertigung aller Arten Pappарbeiten; bearbeitet von. *See* **Vollständige. 59 Neuer Schauplatz der Künste.**

Le Jolis, Auguste. Mémoire de la Société des sciences naturelles de Cherbourg. T. 5. Publié sous la direction de. *See* CHERBOURG.

Lemaire, Ch. Essais sur l'histoire et la culture des plantes bulbeuses, vulgairement appelées ognons à fleurs. 18°. *Paris*, 1843.

LE MANS. La Société d'agriculture, sciences et arts de La Sarthe. Bulletin. T. 13–16, 1857–62. T. 19–22, 1867–74. 8°. *Le Mans*, 1859–74.

Lemert, M. L. A treatise of all sorts of foods, both animal and vegetable, also of drinkables, giving an account how to choose the best sort of all kinds. Of the good and bad effects they produce, the principles they abound with, the time, age and constitution they are adapted to. By the learned M. L. Lemert. Transl. by D. Hay. 12°. *London*, 1745.

Lemling, Joseph. Neue Resultate und Consequenzen für die Praxis der Photographie, Lithographie, des Kupferdrucks, etc. 8°. *Neuwied und Leipzig*, 1866.

——— Die neuesten Entdeckungen und Erfahrungen auf dem Gesammtgebiete der

Digitized by Google

Lemling, Joseph—Continued.
practischen Photographie. Halbband I. 8°. *Neuwied und Leipzig*, 1866.
—— Die photographischen Fortschritte der neuesten Zeit. 18°. *Lüdenscheid*, 1869.
—— Die Photoverrotypie. 12°. *Lüdenscheid*, 1870.
—— Der praktische Photograph. 8°. *Braunschweig*, 1861.

Le Mounier, Pierre Charles. Des principaux instruments d'astronomie, par. PARIS. **Acad. des sc., arts et métiers, v. 42.**

Lempp, Karl. Die Bewirthschaftung des Berkheimer Hofs in der früheren und jetzigen Zeit. 8°. *Stuttgart*, 1872.

Leng, Heinrich. Handbuch der Färberei auf Wolle, Seide, Baumwolle und andere Stoffe; übersetzt von. *See* **Riffault. 21 Neuer Schauplatz der Künste.**
—— Handbuch der Handschuhfabrikation; übersetzt von. *See* **Vollständiges. 84 Neuer Schauplatz der Künste.**
—— Handbuch für Klempner; bearbeitet von. *See* **Lebrun. 53 Neuer Schauplatz der Künste.**
—— Kunst des Messerschmiedes; übersetzt von. *See* **Landrin, M. H. 85 Neuer Schauplatz der Künste.**
—— Lehrbuch der Gewerbskunde nach ihrem ganzen Umfange. *Illus.* 8°. *Ilmenau*, 1834. **62 Neuer Schauplatz der Künste.**
—— Vollständiges Handbuch der Glasfabrikation; bearbeitet von. *Illus.* 8°. *Weimar und Ilmenau*, 1835. **79 Neuer Schauplatz der Künste.**

Lenglier, —. Construction et fabrication des armes à feu; traduit par. *See* **Homilius,** *Colonel.*

Le Normand, *Madame.* The unerring fortune-teller, containing the celebrated oracle of human destiny; or the book of fate. 18°. *New York*, 1866.

Le Normand, L. Sébastien. Handbuch der Papier-Fabrikation, oder vollständige und genaue Beschreibung der Papiermacherkunst, so wie der Pappfabrikation und der Kunst des Formers. Aus dem Französischen in's Deutsche von W. Weinholz *Illus.* B. 1-2. 8°. *Weimar*, 1835. **73, 74 Neuer Schauplatz der Künste.**
—— Manuel de l'horloger. *Illus.* 18°. *Paris*, 1830. **104 Manuels Roret.**
—— Manuel du chandelier, du cirier, et du fabricant de cire à cacheter. 2e éd. 18°. *Paris*, 1836. **64 Manuels Roret.**
—— Manuel du fabricant d'étoffes imprimées, et du fabricant de papiers peints. *Illus.* 18°. *Paris*, 1830. **103 Manuels Roret.**
—— Manuel du fabricant de papier ou de l'art de la papeterie, suivi de l'art du fabricant de carton, et de l'art du formaire. *Illus.* T. 1, 2, 18°; pl., 8°. *Paris*, 1833-34. **37 Manuels Roret.**
—— Manuel du relieur, dans toutes ses parties. 2e éd. *Illus.* 18°. *Paris*, 1831. **65 Manuels Roret.**
—— and **Moléon,** J. G. V. de. Annales de l'industrie nationale et étrangère, ou Mercure technologique. Recueil de mémoires sur les arts et métiers, les manufactures, le commerce, l'industrie, l'agriculture, etc. renfermant la description des musées des produits de l'industrie française. T. 1-23. 8°. *Paris*, 1820-26.
—— —— Annales de l'industrie nationale et étrangère, etc.; renfermant la description du musée des produits de l'industrie française exposés au Louvre en 1819. T. 1-4. 8°. *Paris*, 1820-21.
—— —— Table générale alphabétique des matières contenues dans les vingt-sept volumes qui composent la collection des annales de l'industrie nationale et étrangère. [T. 24 of above sets.] 8°. *Paris*, 1827.

LENS, The Fresnel. *See* NEW YORK (city). **Industrial** exhibition.

Leo, Wilhelm. Die Compression des Torfes und der Braunkohle, wodurch ein Brennmaterial von gleichem Heizwerthe wie die Steinkohle und ganz frei von schädlichen Nebenstoffen auf die billigste Weise dargestellt wird; auf langjährige Erfahrungen gegründet. Für Bergschulen, Torfgrund- und Braunkohlengruben-Besitzer, Eisenbahnen- und Hüttenverwaltungen, Ziegel-, Glas-, Porzelan-, Zuckeretc. Fabriksbesitzer, Metallarbeiter, Verkohlungs- und Gasanstalten und Techniker aller Art in allgemein fasslicher Weise dargestellt. 8°. *Prag*, 1864.

Leon, J. A. On sugar cultivation, in Louisiana, Cuba, etc., and the British possessions. [Composed of several separate tracts.] 8°. *London*, 1848.

Leonard, Levi W. The literary and scientific class book, embracing the leading facts and principles of science, selected

Digitized by Google

Leonard, Levi W.—Continued.
from John Platt's literary and scientific class book, and from various other sources, and adapted to the wants and condition of youth in the United States. *Illus.* 12°. *Keene, N. H.*, 1837.

Leonhard, August. Anweisung für Blecharbeiter, enthaltend: das Eindrücken und Aufziehen auf der Drehbank zur Anfertigung hohler Blecharbeiten aller Art. Eine ausführliche Belehrung über die Eigenschaften der Metalle hinsichtlich ihrer Verarbeitung zu Blechen und Blecharbeiten; die Darstellung des rohen, verzinnten und mit Messing überzogenen Eisenblechs, des Kupfer-, Messing- und Argentanblechs, ihrer Vergoldung und Versilberung, etc. *Illus.* 8°. *Quedlinburg und Leipzig*, 1846.

Leonhard, K. C. v. Hütten-Erzeugnisse und andere auf künstlichem Wege gebildete Mineralien als Stützpuncte geologischer Hypothesen. *Illus.* 8°. *Stuttgart*, 1858.

Lepautre, Jean. Livre d'architecture de porte et cheminées de l'invention, D. A. Pierretz. fol. *Paris*, [1661].

LEPIDOPTERA, Catalogue and synopsis of North American. By J. G. Morris. **Smiths'n misc. coll., v. 3, 4.**

Le Pileur, A. Wonders of the human body. 16°. *New York*, 1870. **Illustrated library of wonders, v. 17.**

Le Play, M. F. Histoire des aciéries de cémentation. Mémoire sur la fabrication et le commerce des fers à acier dans le nord de l'Europe. 8°. [*Paris*, 1846?] *n. t. p.*

——— Rapport sur les commerces du blé, de la farine et du pain, du département de la Seine. *See* FRANCE. **Dépt.** de la Seine.

Le Play, Pierre Guillaume Frédéric. Album de l'exposition universelle; par concours de. *See* **Brisse,** L.

Lerebours, N. P. Observations sur le daguerréotype. *See* **Daguerre,** L. J. M.

——— A treatise on photography. Transl. by J. Egerton. 12°. *London*, 1843.

——— and **Secretan.** Catalogue et prix des instruments d'optique, de physique, de chimie, de mathématiques, d'astronomie et de marine. 8°. *Paris*, 1853.

Leroux, Charles. A practical treatise on the manufacture of worsteds and carded yarns: comprising practical mechanics, with rules and calculations applied to spinning, sorting, cleaning and scouring

Leroux, Charles—Continued.
wools; the English and French methods of combing, drawing, and spinning worsteds, and manufacturing carded yarns. Transl. from the French by H. Paine and A. A. Fesquet. *Illus.* 8°. *Philadelphia*, 1869.

Le Roy, —. Marine watch. A succinct account of the attempts of Messrs. Harrison and Le Roy for finding the longitude at sea, and of proofs made of their works. Done from the French, by a fellow of the Royal society. 4°. *London*, 1768.

Leroy, C. F. A. Traité de stéréotomie, comprenant les applications de la géométrie descriptive à la théorie des ombres, la perspective linéaire, la gnomonique, la coupe des pierres et la charpente. *Illus.* 8° and fol. *Liége*, 1845.

Leroy d'Étiolles, —. Histoire de la lithotritie, précédée de réflexions sur la dissolution des calculs urinaires. 8°. *Paris*, 1839.

Leroy d'Étiolles, Jean Jacques Joseph. Notes sur les canons rayés en hélice et les progrès récents de l'artillerie. 8°. *Paris*, 1860. pp. 45.

L'Escalopier, Charles de,— Théophile, prêtre et moine. Essai sur divers arts, publié par. *See* **Theophilus.**

Leske, Marie. Illustrirtes Spielbuch für Mädchen. 1001 unterhaltende und anregende Belustigungen, Spiele, etc. *Illus.* 8°. *Leipzig*, 1865.

Lesley, J. P. The iron manufacturer's guide to the furnaces, forges and rolling mills of the United States; with discussions of iron as a chemical element, an American ore, and a manufactured article, in commerce and in history. 8°. *New York*, 1859.

——— Manual of coal and its topography. 12°. *Philadelphia*, 1856.

Leslie, Charles Robert. Autobiographical recollections. Ed. by T. Taylor. 12°. *Boston*, 1860.

Leslie, Eliza. The American girl's book; or, occupation for play hours. 16°. *New York*, 1867.

——— Behaviour book: a manual for ladies, etc. 12°. *Philadelphia*, 1859.

——— The Indian meal book; comprising the best receipts for the preparation of that article. 12°. *Philadelphia*, 1847.

——— More receipts; comprising new and useful methods of preparing soups, etc. 7th ed. 12°. *Philadelphia*, 1852.

Digitized by Google

Leslie, Frank. Report on the fine arts. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 1.**

Leslie, John. An experimental inquiry into the nature and propagation of heat. 8°. *London*, 1804.

—— A short account of experiments and instruments depending on the relations of air to heat and moisture. 12°. *Edinburgh*, 1813.

—— Treatises on various subjects of natural and chemical philosophy; with a biographical memoir. Republished from the Encyclopædia Britannica. 8°. *Edinburgh*, 1838.

Lesquereux, Leo. Report on fossil flora. Supplement to 5th annual report of the United States geological survey of the territories for 1871 of F. V. Hayden. *See* UNITED STATES. **Interior** department.

Lesseps, M. Ferdinand de. Percement de l'isthme de Suez. Exposé et documents officiels. 8°. *Paris*, 1855.

LETTER-writer for Germans in the United States. *See* **United** States letter-writer.

Letterman, Jonathan. Medical recollections of the army of the Potomac. roy. 8°. *New York*, 1866.

LETTERS, Origin and progress of. *See* **Massey,** W.

—— patent. *See, also,* **Patents.**

—— patent, English law of. *See* **English** patent law.

—— —— The law and practice of, in England. *See* **Webster,** Thomas.

—— —— Law of, in England. *See* **Coryton,** John.

—— —— Reports of cases on. *See* **Webster,** Thomas.

Leuchs, Johann Carl. Polytechnisches Wörterbuch. 2te Aufl. *Illus.* 8°. *Nürnberg*, 1835.

—— Das Verdunsten oder Verdampfen, und die Mittel es zu erleichtern. Mit besonderer Rüksicht auf das so vortheilhafte Eindunsten des Zukersaftes mit heisser Luft. *Illus.* 8°. *Nürnberg*, 1834.

—— Die Zuker-Fabrikation, oder Anleitung zur Erzeugung des Zukers aus Stärkmehl, Kartoffeln, Gummi, Papier, Stroh und Holz, mit und ohne Schwefelsäure, mit und ohne Sieden. 12°. *Nürnberg*, 1835.

Leupold, Jacob. Theatrum machinarum generale. Schau-Platz des Grundes mechanischer Wissenschaften. B. 1. Mechanic oder Bewegungs-Kunst. B. 2. Wasser-Bau-Kunst. Bde. 3, 4. Wasser-Künste. B. 5. Heb-Zeuge. B. 6. Gewicht-Kunst und Waagen. B. 7. Brücken und Brücken-Bau. B. 8. Rechen- und Mess-Kunst. B. 9. Geometrische Instrumenten, nebst einém allgemeinen Register. fol. *Leipzig*, 1729–39.

LEVELLING, Engineering field notes on. *See* **Castle,** H. J.

—— Engineering field work applied to. *See* **Haskoll,** W. D.

—— Das Massen-Nivellement. *See* **Eickemeyer,** Franz.

—— Das Nivelliren und der Waldwegbau. *See* **Scheppler,** K.

—— The principles and practice of. *See* **Simms,** Frederick W.

—— topography and higher surveying. *See* **Gillespie,** W. M.

—— Traité d'arpentage et de nivellement. *See* **Leclerc,** J., and **Toussaint,** J.

Lever, Darcy. The young sea officer's sheet anchor; or a key to the leading of rigging, and to practical seamanship. 4°. *Leeds*, 1808.

—— Same. Amer. ed. with additions by George W. Blunt. 4°. *New York*, 1853.

Levi, Leone. On taxation: how it is raised and how it is expended. 8°. *London*, 1860.

Le Vieil, Pierre. Art de la peinture sur verre et de la vitrerie. PARIS. **Acad. des sc., arts et métiers, v. 44 and 13.**

Levy, Matthias. The history of short-hand writing. 12°. *London*, 1862.

Lewes, George Henry. Argument for the colouring of the Greek court, Crystal palace. *See* **Jones,** O. **Crystal palace library, v. 1.**

—— Comte's philosophy of the sciences. *See* **Comte,** Auguste.

Lewins, William. Her majesty's mails; a history of the post office, and an industrial account of its present condition. 2d ed. 12°. *London*, 1865.

Lewis, Dio. The new gymnastics for men, women and children; with a translation of Professor Kloss's Dumb-bell instructor and Professor Schreiber's Pangymnasticon. *Illus.* 8°. *Boston*, 1862.

—— Our girls. 12°. *New York*, 1871.

Digitized by Google

Lewis, Elisha J. The American sportsman: containing hints to sportsmen, notes on shooting, and the habits of the game birds and wild fowl of America. *Illus.* 8°. *Philadelphia,* 1855. Later ed., 1863.

——— Hints to sportsmen: containing notes on shooting; the habits of the game birds and wild fowl of America; the dog, the gun, the field and the kitchen. 8°. *Philadelphia,* 1851.

Lewis, W. Commercium philosophico-technicum; or the philosophical commerce of arts. Designed as an attempt to improve arts, trades and manufactures. 4°. *London,* 1763.

LEXICON. Allgemeines Polyglotten-Lexicon der Natur-Geschichte. *See* **Nemnich,** Philipp Andreas.

——— of terms used in natural history. *See* **Ruschenberger,** W. S. W.

Leybourn, William. Cursus mathematicus. Book I. Of arithmetick. II. Of geometry. III. Practical astronomy. IV. Cosmography. V. Trignometry. VI. Geometrical instruments. VII. Navigation. VIII. Dialling. IX. Theory of the planets. fol. *London,* 1690.

——— Dialling plane, concave, convex-projective, reflective, refractive; shewing how to make all such dials, and to adorn them with all useful furniture relating to the course of the sun. 2d ed. collected, methodised and published, by. sm. fol. *London,* 1700.

——— A platform for purchasers; a guide for builders, a mate for measurers. 12°. *London,* 1685.

Librairie française. Catalogue général de la librairie française pendant 25 ans, 1840–1865. Réd. par Otto Lorenz, libraire. T. 1–5.—[T. 1–4 completes the alphabet. T. 5 begins a new alphabet, A–H, as "Tome 1er du catalogue de 1865–75". It is also entitled "depuis 1840", instead of "pendant 25 ans, 1840–1865".] 8°. *Paris,* 1868-76.

LIBRARIES. *See, also,* **Bibliography.**

——— and their founders. *See* **Edwards,** E.

——— Handbuch deutscher Bibliotheken. *See* **Petzholdt,** J.

——— The librarian's manual. *See* **Guild,** R. A.

——— Library manual. *See* Appleton, D., & co.

——— Manual of public libraries, etc., in the United States. *See* **Rhees,** W. J.

LIBRARIES. Manuel du libraire. *See* **Brunet,** J. C.

——— Memoirs of. *See* **Edwards,** E.

——— Public libraries in the United States of America. *See* UNITED STATES. **Interior** department. Bureau of education.

——— Sketches of publick. *See* **Guild,** R. A.

Library of illustrated standard scientific works. 8°. *London,* 1847–65.

CONTENTS.

v. 2, 5. Principles of the mechanics of machinery and engineering. By J. Weisbach.
v. 3, 4, 10. Chemical technology. By F. Knapp.
v. 6. Treatise on the use of the microscope. By J. Quekett.
v. 11. Manual of practical assaying. By J. Mitchell.
v. 12. Introduction to cryptogamic botany. By M. J. Berkeley.
v. 15. Chemical technology. Part 1-4. Part 1, 2. Fuel and its applications. By Edmund Ronalds and Thomas Richardson. Part 3, 4. Acids, alkalies and salts, their manufacture and applications. By Thomas Richardson and Henry Watts.

LICHENS, British, A popular history of. *See* **Lindsay,** W. Lander.

Lichnovsky, Hermann, and **Schuck,** Isidor. Lederwaaren. Kautschukwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 6.**

Liddell, Henry George, and **Scott,** Robert. A Greek-English lexicon, based on the German work of Francis Passow. With corrections and additions, and the insertion in alphabetical order of the proper names occurring in the principal Greek authors, by Henry Drisler. 8°. *New York,* 1858.

Lieb, F., **Schwerdtner,** J., and **Löwy,** Josef. Decorations-Zeichnungen. Graveur- und Guillochirarbeiten. Photographie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

Lieben, Adolf. Chemische Industrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

Lieber, Francis. Encyclopædia Americana; ed. by. *See* **Encyclopædia.**

——— On the vocal sounds of Laura Bridgeman. **Smiths'n contrib., v. 2.**

Lieber, Oscar M. The assayer's guide; or directions to assayers, miners, and smelters, for the tests and assays, by heat and by wet processes, of the ores of all the principal metals, of gold and silver

Digitized by Google

Lieber, Oscar M.—Continued.
coins and alloys, and of coal, etc. 12°. *Philadelphia*, 1864.

Liebig, Justus von. Animal chemistry, or chemistry in its applications to physiology and pathology. Ed. by William Gregory. Part 1. 3d ed. 8°. *London*, 1846.

——— Anleitung zur Analyse organischer Körper. 2te Aufl. *Illus.* 8°. *Braunschweig*, 1853.

——— Chemical analysis; prefaced by. *See* **Fresenius,** C. R.

——— Chemistry, in its application to agriculture and physiology. 4th ed. Ed. from the MSS. by L. Playfair and William Gregory. 8°. *London*, 1847.

——— Correlation and conservation of forces. By Prof. Grove and others. *See* **Grove,** William Robert.

——— Familiar letters on chemistry and its relation to commerce, physiology and agriculture. Edited by J. Gardner. 24°. *New York*, 1843.

——— Familiar letters on chemistry. The philosophical principles and laws of the science. 2d series. Ed. by J. Gardner. 16°. *London*, 1844.

——— The natural laws of husbandry. Ed. by J. Blyth. 8°. *New York*, 1863.

——— Oily acids. *See* **Turner,** E.

——— Organic chemistry, in its application to agriculture and physiology. Ed. by L. Playfair. With notes by J. W. Webster. 12°. *Cambridge*, 1841.

——— Principles of agricultural chemistry, with special reference to the late researches made in England. 12°. *New York*, 1855.

——— Rede in der öffentlichen Sitzung der K. Akademie der Wissenschaften am 28. März, 1863. [Subject: "Fr. Bacon von Verulam und die Geschichte der Naturwissenschaften."] 4°. *München*, 1863. pp. 46.

——— The relations of chemistry to agriculture and the agricultural experiments of J. B. Laws. Transl. by Samuel W. Johnson. 12°. *Albany*, 1855.

——— Researches on the chemistry of food. Ed. by William Gregory. 8°. *London*, 1847.

——— Ueber Gährung; über Quelle der Muskelkraft und Ernährung. 8°. *Leipzig und Heidelberg*, 1870.

——— and **Kopp,** Hermann. Annual report of the progress of chemistry, and the allied sciences, physics, mineralogy, and geology; including the applications of chemistry to pharmacy, medicine, agriculture, the arts and manufactures. Ed. by A. W. Hoffman, W. De la Rue, and H. Bence Jones. v. 1–4, 1847–50. 8°. *London*, 1849–52.

——— ——— Jahresbericht über die Fortschritte der reinen, pharmaceutischen und technischen Chemie, Physik, Mineralogie und Geologie. Unter Mitwirkung von H. Buff, etc. Jahresberichte 1847–75. 8°. *Giessen*, 1849–77——.

——— ——— Jahresbericht über die Fortschritte der reinen, pharmaceutischen und technischen Chemie, etc. Register zu den Berichten für 1847 bis 1856. 8°. *Giessen*, 1858.

——— and **Poggendorff,** J. C. Handwörterbuch der reinen und angewandten Chemie. B. 1–9. Supplement, 1 B. 8°. *Braunschweig*, 1837–64.

Liebig's question to Mulder tested. *See* **Mulder,** G. T.

Liebold, B. Der Zement in seiner Verwendung im Hochbau, und der Bau mit Zement-Béton zur Herstellung feuersicherer, gesunder und billiger Gebäude aller Art. 12°. *Halle a. S.*, 1875.

Liesegang, Paul E. Handbuch der Photographie auf Collodion. 2te Aufl. 16°. *Berlin*, 1860.

——— Moniteur de la photographie; réd. par. *See* **Moniteur.**

——— Der photographische Kohle-Druck. Swan's Tuschverfahren. 12°. *Berlin*, 1868.

Lietzmann, J. C. H. Die Herstellung der Leder in ihren chemischen und physikalischen Vorgängen. 8°. *Bonn*, 1870. 2te Aufl., *Berlin*, 1875.

LIFE boats. By Captain Washington. *See* **Lectures** on the results of the exhibition.

——— of the Greeks and Romans. *See* **Guhl,** E., and **Koner,** W.

——— of the globe, past and present. *See* **Page,** D.

——— of William Penn, the founder of Pennsylvania: with numerous illustrative anecdotes and embellishments. 16°. *Philadelphia*, 1849.

——— Philosophy of human. *See* **Jennings,** I.

Digitized by Google

LIFE, sleep, pain, etc., Essays on. *See* **Dickson**, Samuel Henry.

Liger, F. Fosses d'aisances, latrines, urinoirs et vidanges. Historique, construction, ventilation, désinfection, études des différents systèmes; application à l'agriculture, législation et jurisprudence. [Forms part of 'Dictionnaire historique et pratique de la voirie, de la construction, de la police municipale et de la contiguité', with which title-page is headed.] *Illus.* 8°. *Paris*, 1875.

Liggins, John. One thousand familiar phrases, in English and Romanized Japanese. 2d ed. 8°. *New York*, 1867.

LIGHT and electricity. *See* **Tyndall**, John.

—— and heat, Elements of. *See* **Kyan**, John Howard.

—— Chemistry of. *See* **Scoffern**, J. **Orr's circle of the sciences, v. 6.**

—— Chemistry of artificial. *See* **Scoffern**, J. **Orr's circle of the sciences, v. 7.**

—— Chemistry of light and photography. *See* **Vogel**, Hermann. **International scientific series, v. 14.**

—— color, electricity and magnetism. *See* **Jencken**, Johann Ferdinand.

—— Gesetze des Lichtes und des Schalles. *See* **Newth**, Samuel. **190 Neuer Schauplatz der Künste.**

—— heat and fire, A dissertation upon. *See* **Hutton**, James.

—— Lectures on polarized. *See* **Pereira**, J.

—— Lichtstärke der Planeten Venus, Mars, Jupiter und Saturn. *See* **Seidel**, L.

—— The nature of. *See* **Lommel**, Eugene. **International scientific series, v. 18.**

—— Nature, sources, effects and applications of. *See* LONDON. **Society** for promoting christian knowledge.

—— Polarized light. *See* **Woodward**, Charles.

—— Researches on. Chemical and molecular changes produced by the influences of the solar rays. *See* **Hunt**, Robert.

—— shade and color, First exercises in. *See* **First** exercises.

—— water supply and sewerage. *See* **American** gas light journal.

LIGHTHOUSE illumination. *See* **Stevenson**, T.

—— illumination of the coast of France. *See* **Reynaud**, Léonce.

LIGHTHOUSES, Account of Skerryvore lighthouse, with notes on the illumination of. *See* **Stevenson**, Alan.

LIGHTHOUSES and lightships. By W. H. D. Adams. *See* **Illustrated library of wonders, v. 18.**

—— Atchafalaya lighthouse, Louisiana, Specifications of. *See* UNITED STATES. **Treasury** department.

—— Construction of the Eddystone lighthouse, and that on Spurn point. *See* **Smeaton**, J.

—— The Fresnel lens. *See* NEW YORK (city). **Industrial** exhibition.

—— History, construction, and illumination of. *See* **Stevenson**, A. **Weale's series, Nos. 47–49.**

—— Report of a tour of inspection of European lighthouse establishments in 1873. By Major George H. Elliot. *See* UNITED STATES. **Treasury** department.

—— Report of the lighthouse board. *See* UNITED STATES. **Treasury** department.

—— Report upon the condition of the lighthouses, etc., upon the coasts of Maine, New Hampshire and Massachusetts. *See* UNITED STATES. **Treasury** department.

LIGHTING. *See, also,* **Illumination.**

—— Beleuchtungs-Substanzen. *See* **Schmidt**, C. H. **230 Neuer Schauplatz der Künste.**

—— Das Beleuchtungswesen. *See* **Bolley**, P.

—— L'éclairage par l'électricité. *See* **Delatot-Sevin.**

—— Holz- und Torfgas-Beleuchtung. *See* **Reissig**, W.

—— Die Kunst der Erleuchtung. *See* **Péclet**, J. C. E. **40 Neuer Schauplatz der Künste.**

—— Licht und Feuer oder die Feuerzeugfabrikation. *See* **Wagner**, Heinrich. **289 Neuer Schauplatz der Künste.**

—— Remarks on exclusive. *See* **Reid**, D. B.

—— Traité de l'éclairage. *See* **Péclet**, J. C. E.

LIGHTNING. Die Anlegung der Blitzableiter. *See* **Gay-Lussac**, J. L., and **Pouillet**, C. S. M. **229 Neuer Schauplatz der Künste.**

—— Means of protecting against. *See* **Harris**, W. S.

—— Protection from the effects of. *See* **Turnbull**, L. **Electro-magnetic** telegraph.

LIGNEOUS plants around London. *See* **Loudon**, J. C.

Digitized by Google

LIGURIA. Atti della Società Ligure di storia patria. *See* GENOA.

LIMBS, artificial, Amputations and. *See* **Grossmith**, W. R.

——— ——— Report of the Société de chirurgie. *See* **Palmer**, B. F.

LIME. Art de préparer la chaux. *See* **Martin**, E. **Encyclopédie populaire, v. 11.**

——— Art du chaufournier. Par C. R. Fourcroy de Ramecourt. *See* PARIS. **Académie royale des sc.; arts et métiers, v. 1 and 4.**

——— Kalk, Gyps und Cement. *See* **Böhmer**, Emil, and **Neumann**, Friedrich. **28 Neuer Schauplatz der Künste.**

——— Kalkbrennerei. *See* **Wolfer**, M. **28 Neuer Schauplatz der Künste.**

——— Manuel du chaufournier. *See* **Biston**, V. **50 Manuels Roret.**

LIMES and cements, Calcareous and hydraulic. *See* **Austin**, James G.

——— calcareous cements, mortars, stuccos, concretes, etc., Observations on. *See* **Pasley**, C. W.

——— cements, mortars, etc. *See* **Burnell**, G. R. **Weale's series, No. 45.**

Linas, Charles de. Anciens vêtements sacerdotaux, et anciens tissus conservés en France. T. 1–3. *Illus.* 8°. *Paris*, 1860–63.

Lincoln, Abraham, Life of. *See* **Barrett**, J. H.

Lincoln, William J., Priced catalogue of foreign, colonial and British postage-stamps, and receipt stamps, offered for sale by. 18°. *London, n. d.*

Lind, Carl. Kunst, etc., früherer Zeiten. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 24.**

Lindes, August Wilhelm, und **Bräutigam**, Carl. Handbuch der Saffian-Fabrikation. Ein sicherer Leitfaden wie der schönste Saffian auf die einfachste und vortheilhafteste Weise bereitet wird. 8°. *Berlin*, 1860.

Lindheim, Wilhelm v. Russland. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Lindley, John. A glossary of botanical terms. 8°. *London*, 1861.

——— Ladies' botany; a familiar introduction to the study of the natural system of botany. 6th ed. 2 v. 8°. *London*, 1865.

——— Medical and œconomical botany. 2d ed. 8°. *London*, 1856.

Lindley, John. Substances used as food. *See* **Lectures** on the results of the exhibition.

——— The theory of horticulture; an attempt to explain the principal operations of gardening upon physiological principles. 2d Amer. ed. with notes, by A. J. Downing. 12°. *New York*, 1852.

——— The vegetable kingdom; or the structure, classification and uses of plants. *Illus.* 8°. *London*, 1846.

Lindsay, W. Lander. A popular history of British lichens, containing an account of their structure, reproduction, uses, distribution and classification. 16°. *London*, 1856.

Lindsley, David Philip. The elements of tachygraphy; illustrating the first principles of the art. 12°. *Boston*, 1860.

LINEN. Art de la lingère. Par F. A. P. de Garsault. PARIS. **Acad. des sc.; arts et métiers, v. 31 and 14.**

——— History of. *See* **History** of silk, cotton, linen, etc.

——— Industrie linière. *See* **Kindt**, Jules.

——— Lehrbuch der Linnen- und Tischzeugweberei. *See* **Sennewald**, Georg. **106 Neuer Schauplatz der Künste.**

Lines, Robert B. Report on telegraphs and telegraphic administration. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 2.**

Ling, Peter Henry. Theory and practice of the movement cure, etc. *See* **Taylor**, Charles Fayette.

LINK-motion and expansion-gear, practically considered. *See* **Burgh**, N. P.

——— ——— Slide-valve and. *See* **McCarthy**, D. E.

Linke, Gustav. Der Bau der Dorn'schen Lehmdächer nach eigenen Erfahrungen. 8°. *Braunschweig*, 1837.

Linn, R. M. Lookout landscape photography: a practical manual, embodying the formulæ, processes, and methods of operating, used and practiced by the late Prof. R. M. Linn. 16°. *Philadelphia*, 1872.

Linsley, D. C. Morgan horses; a premium essay, on the origin, history and characteristics of this remarkable breed of horses. 12°. *New York*, 1857.

Linton, William. Ancient and modern colours, from the earliest periods to the present time, with their chemical and artistic properties. 8°. *London*, 1852.

Digitized by Google

LINTZ. Statistische Daten betreffend die Gebär-Findel-Irren-Anstalt zu Linz. In Druck gegeben von Dr. Figulp. 8°. *Linz*, 1863. pp. 36.

——— Summarischer Bericht betreffend die Verhältnisse der Industrie, des Handels und Verkehres Oberösterreichs im Jahre 1870. 8°. *Linz*, 1871.

Lionnet-Clémandot, J. Manuel du limonadier, etc., refondu par. *See* **Cardelli. 59 Manuels Roret.**

Lipowitz, A. Die Portland-Cement-Fabrikation, nach eigenen praktischen Erfahrungen. 8°. *Berlin*, 1868.

Lippich, Ferdinand, and others. Mathematische, etc., Instrumente. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Lippincott's new pronouncing gazetteer. *See* **Thomas,** J.

Lippitt, Francis J. Field service in war; comprising marches, camps and cantonments, outposts, convoys, reconnaissances, foraging, and notes on logistics. 18°. *New York*, 1869.

——— The special operations of war; comprising the forcing and defence of defiles and rivers, and the passage of rivers in retreat; the attack and defence of open towns and villages, etc. 18°. *Providence*, 1868.

——— A treatise on intrenchments. 18°. *New York*, 1866.

Lipsius, Justus. De militia Romana libri quinque; commentarius ad Polybium. Editio ultima. 4°. *Antverpiæ*, 1614.

LIQUID carbonic acid. By Walter N. Hill. *See* UNITED STATES. **Navy dept. Ordnance papers.**

LIQUORS. Art du distillateur liquoriste. Par J. F. Demachy. PARIS. **Acad. des sc.; arts et métiers, v. 37 and 12.**

——— Fermented. *See* **Feuchtwanger,** L.

——— Die Likör-Fabrikation in ihrem ganzen Umfange, etc. *See* **Fischer,** Anton.

——— Liqueurfabrication. *See* **Schedel,** C. F. B. **24 Neuer Schauplatz der Künste.**

——— Manufacture and distillation of alcoholic liquors. *See* **Duplais,** *aîné et jeune.*

——— syrups, cordials and bitters, A treatise on. *See* **Eichler,** Fr. A.

——— Traité des liqueurs. *See* **Duplais,** P.

LISBON. Imprensa nacional de Lisboa. *See* PORTUGAL. **Imprensa nacional.**

——— National printing office. Philadelphia exhibition of 1876. The national printing office at Lisbon; an historical and statistical notice, with the catalogue of the products exhibited. 8°. *Lisbon*, 1876.

List, Frederick. National system of political economy. Transl. from the German by G. A Matile. 8°. *Philadelphia*, 1856.

LITERARY men. Lives of the early writers of Great Britain. *See* **Dunham,** S. A., and **Bell,** R. **Lardner's cabinet cyclopædia, 95.**

——— ——— of France, Lives of. *See* **Shelley,** M. W. **Lardner's cabinet cyclopædia, 91, 92.**

——— ——— of Italy, Spain and Portugal, Lives of. *See* **Shelley, M.** W., and others. **Lardner's cabinet cyclopædia, 88-90.**

——— property. Code de la propriété littéraire. *See* **Blanc,** E., and **Beaume,** A.

——— ——— History of. *See* **Curtis,** G. T. **Law** of copyright.

——— ———Organon de la propriété intellectuelle. *See* **Jobard,** J. B. A. M.

LITERATURE, Dictionary of. *See* **Brande,** W. T.

——— Dictionnaire des lettres. *See* **Bouillet,** M. N.

——— Dictionnaire des lettres. *See* **Courtin,** E. M. P. M. A. **Encyclopédie moderne.**

——— Écho de la littérature et des beaux-arts. *See* **Écho** de la littérature.

——— Encyclopedia of general. *See* **Blake,** J. L.

——— Encyclopædia of literary anecdote. *See* **Timperley,** C. H.

——— Index to current. *See* **Index.**

——— Literary and scientific class-book. *See* **Leonard,** Levi W.

——— Method of teaching and studying the belles-lettres. *See* **Rollin,** Charles.

LITHOGRAPHY. Art of drawing on stone. *See* **Hullmandel,** C.

——— Course of. *See* **Senefelder,** A.

——— Das Ganze des Steindrucks. *See* **Pescheck,** H. E. **43 Neuer Schauplatz der Künste.**

Digitized by Google

LITHOGRAPHY. La lithographie, etc. Par P. Burty. *See* **Lagrange, L.** La peinture au salon de 1861.

——— Lithographie und Chromographie. Von Conrad Grefe. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

——— Manual of. *See* **Raucourt.**

——— Manuel de l'imprimeur lithographique. *See* **Brégeant, R. L. 116 Manuels Roret.**

LITHOTRITY. Histoire de la lithotritie, etc. *See* **Leroy d'Etiolles.**

——— Traité pratique et historique de la lithotritie. *See* **Civiale.**

LITHOZÔGRAPHIA. *See* **Aresti, J.**

Little, A. B., and **Lawrence,** De W. C. Report of the board of appeal United States patent office, in the matter of the application of Wm. Wickersham for a patent for improvements in sewing machines, on interference with the patents granted I. M. Singer, August 12th, 1851, and November 4th, 1856, for similar improvements. 8°. *Washington*, 1859. pp. 16.

Little, Robert. The Washington quarterly magazine of arts, science and literature. *See* **Washington** quarterly magazine.

Little, Brown, and co. A catalogue of books, ancient and modern. 8°. *Boston*, 1854.

Little kingdom (The): or servants of the stomach. *See* **Mace, Jean.**

Little, (The) magic. Multum in parvo: a choice collection of valuable receipts. 24°. *Cambridge*, 1858. pp. 32.

Littlefield, D. G. A history of the improvements applicable to the base burning or horizontal draught stove from the original invention by M. Delesme, in 1680, to the present time, and the base burning stove as an engine of combustion compared with other stoves. 8°. *Albany*, 1860.

Littré, Émile. Dictionnaire de la langue française, contenant, 1°. Pour la nomenclature: tous les mots qui se trouvent dans le dictionnaire de l'Académie française et tous les termes usuels des sciences, des arts, des métiers et de la vie pratique. 2°. Pour la grammaire: la prononciation de chaque mot figurée et, quand il y a lieu, discutée; l'examen des locutions, des idiotismes, des exceptions. 3°. Pour la signification des mots: les définitions; les diverses exceptions rangées dans leur ordre logique, avec de nombreux exemples, les synonymes. 4°. Pour la partie historique: une collection de phrases appartenant aux anciens écrivains depuis les premiers temps de la langue française jusqu'au seizième siècle. 5°. Pour l'étymologie: la détermination ou du moins la discussion de l'origine de chaque mot. T. 1, 2. [Bound in 4 v.] 4°. *Paris, Londres, Leipzig*, 1863–69.

LIVERPOOL. Literary and philosophical society. Report of the proceedings. Nos. 1 to 29, 1844–45 to 1874–75. 8°. *Liverpool*, 1845–75——.

——— Photographic journal. *See* **British** journal of photography.

——— Polytechnic society. Transactions. 2 v. 1844–46, 1853–56. 8°. *Liverpool*, 1847–56. [Other imperfect vols.]

Lives of distinguished shoemakers. 12°. *Portland*, 1849.

——— of engineers. *See* **Smiles,** Samuel.

Livingston, John. The law register; comprising the lawyers in the United States: the state record; containing the state and county officers, the organization, jurisdiction, and terms of the courts for every state and territory: the official directory for the United States; containing the officers of the federal government, the duties of the several departments, sketches of all the members of congress, the officers and terms of the federal courts: the collector's assistant; giving the laws for collecting debts, executing deeds, verifying claims, and taking testimony, with forms for every state: with much other useful information; the whole constituting an official and business union directory. 8°. *New York*, 1868.

——— Livingston's United States law register and official directory. 12°. *New York*, 1859. Later ed., 1868.

Lixante, A. Der Strassen-, Eisenbahn-, Canal-, Brücken-, Küstendamm-, Deich- und Hafenbau, sowie die Bewässerungsarbeiten. Nach dem Französischen, mit beständiger Rücksicht auf deutsche Art und Bedürfniss, von Friedrich Harzer. *Illus.* 8°. *Weimar*, 1851. **189 Neuer Schauplatz der Künste.**

Digitized by Google

Lloyd, A. Horace. Handbook of fresh water aquaria; ed. by. *See* **Bishop,** James, and others.

Lloyd, R. Experiments in locomotive engines, by MM. Gouin and Le Chatelier; transl. by. *See* **Wale's papers on engineering, v. 6.**

Lloyd, William Watkins. The age of Pericles; a history of the politics and arts of Greece from the Persian to the Peloponnesian war. 2 v. 8°. *London,* 1875.

—— Argument for the colouring of the Greek court. Crystal palace. *See* **Jones,** O. **Crystal palace library, v. 1.**

LOADSTONE, Experiments concerning the nature and property of the. *See* **Barlowe,** William.

Löbe, William. Illustrirte Landwirthschaftliche Dorfzeitung; hrsg. von. *See* **Illustrirte.**

Lobmeyer, Ludwig, and **Falke,** Jakob. Glasindustrie. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 9.**

Locard, E. Recherches sur les rails et leur supports: notes sur la durée, la résistance et les dimensions des rails, coussinets, etc. *See* **Barlow,** P., and **Wood,** N.

Lock, Mathew. A collection of ornamental designs, applicable to furniture, frames, and the decoration of rooms, in the style of Louis XIV. *Illus.* 4°. *London,* 1841.

—— A new drawing book of ornaments, shields, compartments, marks, etc. 2 parts. sm. 4°. *London, n. d.*

Locke, John. Terrestrial magnetism. **Smiths'n contrib., v. 3.**

Locke, Joseph, Life of. *See* **Devey,** Joseph.

Locke, Richard. A new problem to discover the longitude at sea, by the same observation, and with the same certainty, as the latitude is. 8°. *London,* 1751. pp. 24.

Lockert, Louis. Le technologiste; ed. by. *See* **Technologiste.**

LOCKS and safes, Construction of. *See* **Chubb,** George Hayten.

—— Construction of. *See* **Tomlinson,** C. **Weale's series, No. 83**.**

—— latches, and hardware, Price list of. *See* Pratt & Co.

—— latches, bolts, and similar fastenings. **Abridgments English Patents, No. 60.**

LOCKS, Naval percussion. *See* **Dahlgren,** J. A.

—— Sammlung der neuesten Constructionen von Schlosserarbeiten. *See* **Hoppe,** F.

—— Treatise on fire and thief proof depositories and. *See* **Price,** G.

LOCKSMITH. Arbeiten des Schlossers. *See* **Rössler,** H., and **Fink,** Franz.

—— Art du serrurier. Par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sci.; arts et métiers, v. 12 and 6.**

—— Manuel du serrurier. *See* **B.** and others. **67 Manuels Roret.**

—— Schlosserkunst. *See* **König,** J. **168 Neuer Schauplatz der Künste.**

—— Schlossermeister. *See* **Grandpré,** L. M. J. O. de. **50 Neuer Schauplatz der Künste.**

Lockyer, J. Norman. Applications of physical forces; ed. by. *See* **Guillemin,** Amédée.

—— The sun. **Science lectures for the people, series 2.**

Lockyer, *Mrs.* Norman. Applications of physical forces; transl. by. *See* **Guillemin,** Amédée.

LOCOMOTION, Aids to. **Abridgments English Patents, No. 7.**

—— Elemental Locomotion and interior communication. *See* **Gordon,** A.

LOCOMOTIVES. Abbildung und Beschreibung der Locomotive-Maschine. *See* **Heusinger von Waldegg,** E., and **Clauss,** W.

—— Atlas of the locomotive in all its phases. *See* **Dempsey,** G. Drysdale.

—— Der Bau der Locomobilen und transportablen Dampfmaschinen. *See* **Weber,** Hermann.

—— Chemins de fer, Paris, 1867; les locomotives et le matériel de transport. *See* **Taillard,** Ernest.

—— Gesetze des Locomotiv-Baues. *See* **Redtenbacher,** F.

—— Grundzüge eines neuen Locomotivsystems für Gebirgsbahnen. *See* **Wetli,** K.

—— Handbuch für Locomotiven-Führer. *See* **Flachat,** C., and others. **127 and 192 Neuer Schauplatz der Künste.**

—— Improvements in. *See* **Sellers,** G. E.

—— Das Locomotiven-Blasrohr. *See* **Zeuner,** G.

—— Principles and practice of. *See* **Tredgold,** T. **Steam engine, v. 1.**

Digitized by Google

LOCOMOTIVES, Recent practice in. *See* **Clark**, D. K., and **Colburn**, Z.

—— Die Schiebersteuerungen. *See* **Zeuner**, G.

—— Skizzen und Hauptdimensionen der Locomotiven. *See* **Heusinger von Waldegg**, Edmund.

—— Die stationären und lokomobilen Dampfmaschinen. *See* **Neumann**, Friedrich. **224 Neuer Schauplatz der Künste.**

—— Student's guide to the locomotive engine. *See* **Flachat**, E., and **Petiet**, J.

—— Theoretische Untersuchung der Constructionssysteme des Unterbaues von Locomotiven. *See* **Einbeck**, Johannes.

—— Treatise on. *See* **Pambour**, F. M. G. de.

—— Ueber das Wanken der Locomotiven. *See* **Zeuner**, G.

—— Who invented the locomotive engine? *See* **Hedley**, O. D.

LOCUSTS. Entomological commission. Rocky mountain locusts. *See* UNITED STATES. **Interior dept. Geolog. survey F. V. Hayden. Bulletin Nos. 1, 2.**

Lodge, G. Henry. Winckelmann's history of ancient art; transl. by. *See* **Winckelmann**, John.

Loeffler. Die Fundirung der Eisenbahnbrücke, über den Pregel in Königsberg. fol. *Berlin*, 1867.

Löffler, Karl. Ueber die Runkelrübenzucker-Fabrikation. 8°. *Berlin*, 1863.

Loftie, W. J. A plea for art in the house, with special reference to the economy of collecting works of art, and the importance of taste in education and morals. 8°. *Philadelphia*, [1877].

LOGANIAN library. *See* PHILADELPHIA. [†]

LOGARITHMS. Logarithmic tables. *See* **Bates**, David.

—— of numbers, Tables of. *See* **Loomis**, Elias.

—— Treatise on. *See* **Law**, H. **Weale's series, Nos. 94, 95.**

LOGIC, Essay on. *See* **Law**, H. Elements of Euclid. **Weale's series, No. 88.**

—— A treatise on. *See* **Jevons**, W. Stanley.

Lohmann, Adolph. Der Wasser-Mahlmühlen-Bau. 8°. *Weimar*, 1856. **223 Neuer Schauplatz der Künste.**

Loisel. Traité complet de la culture des melons. Nouvelle méthode de cultiver ces plantes sous cloches, sur buttes et sur couches. 3e éd. 12°. *Paris, n. d.*

LOMBARDY. Reale istituto Lombardo di scienze e lettere. *See* MILAN.

Lommel, Eugene. The nature of light: with a general account of physical optics. 12°. *New York*, 1876. **International scientific series, v. 18.**

London and Edinburgh philosophical magazine and journal of science; conducted by Sir David Brewster, Richard Taylor and Richard Phillips. [With the addition of 'Dublin' to the title from 1840, and of Sir Robert Kane to the editors.] 3d series, v. 1–37, 1832–50; 4th series, v. 1–50, 1851–75; 5th series, v. 1, 2, 1876. 8°. *London*, 1832–76——.

LONDON. Anthropological institute of Great Britain and Ireland. Journal. v. 1–5, 1871–76. 8°. *London*, 1872–76——.

—— Anthropological society. Journal. *See* **Anthropological Review.**

—— bridge, Observations on the rebuilding of. *See* **Seaward**, J.

—— British horological institute. The horological journal. v. 1–19. 8°. *London*, 1859–77.

—— British museum, A list of the books of reference in the reading room of the. 8°. *London*, 1859. [†]

—— catalogue. Bibliotheca Londinensis; a classified index to the literature of Great Britain during thirty years, 1814–46. Arranged from and serving as a key to the London catalogue of books. 8°. *London*, 1848.

—— —— (The) of books, published in Great Britain. From 1814 to 1846. 8°. *London*, 1846. Also later editions, 1816–51 and 1831–55.

—— —— The classified index to the London catalogue of books published in Great Britain, 1816 to 1851. 8°. *London*, 1853.

—— —— (The) of periodicals, newspapers and transactions of various societies, also a list of metropolitan printing societies and clubs. 8°. *London*, 1862. pp. 16.

—— Chemical society. The quarterly journal. Ed. by Edmund Ronalds. v. 1–15, 1847–62. New series, v. 1–15, 1863–76, ed. by Henry Watts. 8°. *London*,

Digitized by Google

LONDON. Chemical society—Continued. 1849–76.—[From v. 14 of the first series "Quarterly" is omitted in the title.]

—— Corps of royal engineers. Papers on subjects connected with the duties of the corps of royal engineers. 10 v. 4°. *London*, 1844–49. [†]

—— Crystal palace, Sydenham. Industrial products of Tasmania. *See* TASMANIA.

—— Electrical society. Proceedings during the sessions 1841–2 and 1842–3. Ed. by Charles V. Walker. 8°. *London*, 1843.

—— —— —— The transactions and proceedings. From 1837 to 1840. 4°. *London*, 1841.

—— Exhibition of 1851. *See, also,* **Exhibitions**, Industrial. London, 1851.

—— —— Bearing of the exhibition on the progress of art and sciences. By W. Whewell. *See* **Lectures** on the results of the exhibition.

—— —— Essay on the. *See* **Tomlinson**, C. Cyclopædia of useful arts, etc.

—— —— Étude des œuvres les plus remarquées à l'exposition en 1851. *See* **Laboulaye**, C.

—— —— Les instruments d'agriculture à l'exposition universelle de Londres. *See* BELGIUM.

—— —— The journal of the great exhibition of 1851; its origin, history, and progress. 4°. *London*, 1851.

—— —— Die landwirthschaftlichen Geräthe der Londoner Ausstellung im Jahre 1851. *See* **Rau**, Karl Heinrich.

—— —— Official descriptive and illustrated catalogue. v. 1–3, and supplementary vol. 8°. *London*, 1851.

—— —— Reports of the juries on the subjects in the thirty classes into which the exhibition was divided. 8°. *London*, 1852.

—— Exhibition of 1862. Indian department. Classified and descriptive catalogue. By J. Forbes Watson. roy. 8°. *London*, 1862.

—— —— The illustrated catalogue of the industrial department. v. 1–4. 8°. *London*, 1862.

—— —— Official catalogue of the fine art department. 8°. *London*, 1862.

—— —— Official catalogue of the industrial department. 3d ed. *London*, 1862.

LONDON. Exhibition of 1862. Die Photographie auf der Weltausstellung 1862. *See* **Vogel**, H.

—— —— Record of the exhibition, 1862. *See* **Carriage** builder's art journal.

—— —— Record of the international exhibition, 1862. 4°. *London*, 1862.

—— —— Reports by the juries on the subjects in the thirty-six classes into which the exhibition was divided. 8°. *London*, 1863.

—— Exhibition of 1873. Melbourne official record. *See* VICTORIA.

—— Improvement committee. Report on general improvements; with Haywood's report of July 22, 1869. fol. *London*, 1869.

—— Institution of civil engineers. Charter, by-laws, and list of members. 8°. *London*, 1867. Also ed. 1873.

—— —— List of members. 12°. *London*, 1871. pp. 48.

—— —— Transactions. v. 1–3. 4°. *London*, 1836–42.

—— Institution of naval architects. Transactions. Ed. by E. J. Reed. v. 1–17. 4°. *London*, 1860–76——.

—— (The) journal of arts and sciences; containing reports of all new patents, with a description of their respective principles and properties; also original communications on subjects connected with science and philosophy; particularly such as embrace the most recent inventions and discoveries in practical mechanics. 1st series, v. 1–14, 1820–27. 2d series, ed. by W. Newton and C. F. Partington, v. 1–9, 1828–32. 3d or conjoined series [entitled also Repertory of patent inventions], v. 1–45, 1832–54. 4th series [entitled also Record of the progress of invention as applied to the arts, and beginning Newton's London journal, etc.], v. 1–23, 1855–66. 8°. *London*, 1820–66.

—— Journal of gas lighting, water supply, and sanitary improvements. *See* **Journal** of gas lighting.

—— labor and London poor. *See* **Mayhew**, Henry.

—— Marylebone free library. First annual report. 8°. *London*, 1854. pp. 16.

—— (The) mechanics' register. v. 1–4. 8°. *London*, 1824–26.

—— microscopical society. Transactions. New series, v. 1–16. 8°. *London*, 1853–68.

Digitized by Google

LONDON—Continued.

[The Transactions and Quarterly journal of microscopical science are bound together.]

——— Modern. *See* **Modern** London.

——— news, The illustrated. *See* **Illustrated** London news.

——— photographic society. Journal. Ed. by Hugh W. Diamond. v. 1–15. 8°. *London*, 1853–76.

——— polytechnic magazine and journal. *See* **Polytechnic** review and magazine.

——— Port of. Report of the committee appointed to enquire into the best mode of providing sufficient accommodation for the increased trade and shipping of the port of London. 2 v. fol. *London*, 1796.

——— Port of. Report from the select committee upon the improvement of the port of London. fol. *London*, 1801.

——— Post office directory for 1868, comprising amongst other information, official directory, street directory, commercial directory, trades directory, law directory, court directory, parliamentary directory, postal directory, etc. 69th annual publication. 8°. *London*, 1868.

——— Public buildings of. *See* **Pugin**, A., and **Britton**, J.

——— Quarterly journal of science and the arts. *See* LONDON. **Royal** institution.

——— Quarterly journal of science and the arts. Index to the first twenty vols. *See* LONDON. **Royal** institution.

——— Quarterly review. American ed. v. 84–142. [v. 100 and 123 are indexes, and are wanting.] 8°. *New York*, 1848–76——.

——— Royal agricultural society of England. Journal. 1st series, v. 1–25, 1840–64; 2d series, v. 1–12, 1865–76. 8°. *London*, 1840–76——.

——— Royal college of physicians. Pharmacopœia collegii regalis medicorum Londonensis. 8°. *Londini*, 1851.

——— ——— A translation of the new London pharmacopœia, including also the new Dublin and Edinburgh pharmacopœias, etc. Transl. by J. Birkbeck Nevins. 12°. *London*, 1851.

——— Royal institution. The journal of science and the arts. Ed. by W. T. Brande. v. 1–22. 2d series, v. 1–7. [From 1819 called Quarterly journal.] 8°. *London*, 1817–30.

——— ——— Index to the first twenty volumes. 8°. *London*, 1826.

LONDON. Royal institution. Catalogue of scientific papers compiled and published by the society, 1800–63. 2 v. 4°. *London*, 1867–68.

——— Royal society. Catalogue of the library. 4°. *London*, 1825.

——— ——— Catalogue of the scientific books in the library. 8°. *London*, 1839.

——— ——— History of, with memoirs of the presidents. *See* **Weld**, C. R.

——— ——— The philosophical transactions and collections abridged and disposed under general heads, to the end of the year 1700. By John Lowthorp. v. 1–3. v. 1, miscellaneous papers. v. 2, physiological papers. v. 3, pt. 1, anatomical, medical, and chymical papers; pt. 2, the philological and miscellaneous papers. 2d ed. 4°. *London*, 1716. [Another copy, 1st ed. 1705.]

——— ——— Same, 1700–20. By Henry Jones. v. 4, 5. v. 4, pt. 1, mathematical papers; pt. 2, physiological papers. v. 5, pt. 1, anatomical and medical papers; pt. 2, philological and miscellaneous papers. 2d ed. 4°. *London*, 1731.

——— ——— Same, 1719–33. By John Eames and John Martyn. v. 6, 7. v. 6, pt. 1, mathematical papers; pt. 2, physiological. v. 7, pt. 3, anatomical and medical; pt. 4, philological and miscellaneous. 4°. *London*, 1734.

——— ——— Same, 1732–44. The Latin papers being translated into English by John Martyn. v. 8, 9. v. 8, pt. 1, mathematical papers; pt. 2, physiological. v. 9, pt. 3, anatomical and medical; pt. 4, historical and miscellaneous. 4°. *London*, 1747.

——— ——— Same, 1743–50. Latin papers translated by John Martyn. v. 10, 11. v. 10, pt. 1, mathematical papers; pt. 2, physiological. v. 11, pt. 3, anatomical and medical; pt. 4, historical and miscellaneous. 4°. *London*, 1761.

——— ——— Philosophical transactions. From the year 1739 to 1875. v. 41–175. 4°. *London*. 1744–1876——. [Appended to several volumes are meteorological tables; also a list of members. Part 2 of v. 162 wanting.]

——— ——— Same. A general index from the first to the end of the seventieth volume. By Paul Henry Maty. 4°. *London*, 1787. Index, v. 71–110. 4°. *London*, 1821. Index, v. 111–120. [Last two bound in one.] 4°. *London*, 1833.

Digitized by Google

LONDON. Royal society. Report of the committee of physics, including meteorology, on the objects of scientific inquiry in those sciences. 8°. *London*, 1840.

——— Society for promoting Christian knowledge. Light: its nature, sources, effects, and applications. 16°. *London, n. d.*

——— Society for the diffusion of useful knowledge. The British almanac for the years 1832-75. 43 v. sm. 8°. *London*, 1832-76——. [Vols. for 1849, 1850, and 1865 wanting.]

——— ——— Library of useful knowledge. Dynamics, construction of machinery, equilibrium of structures, and the strength of materials. *See* **Warr**, G. F.

——— ——— Library of useful knowledge. Natural philosophy. v. 1-3. 8°. *London*, 1829-34.

CONTENTS.

v. 1. Objects, advantages, and pleasures of science, by Lord Brougham. Mechanics, three treatises, by D. Lardner. Hydrostatics, by Lord Brougham. Hydraulics, by J. Millington. Pneumatics, by D. Lardner. Heat, by Mr. Ogg. Optics, by Sir D. Brewster. Double refraction and polarization of light, by Sir D. Brewster. With an explanation of scientific terms, and an index by D. Booth.

v. 2. Popular introduction to natural philosophy, by Mrs. J. Marcet. Newton's Optics, by D. Lardner. Description of optical instruments, by A. Pritchard. The thermometer and pyrometer, by T. S. Traill. Electricity, galvanism, magnetism, electro-magnetism, by P. M. Roget. With an explanation of scientific terms, and an index by D. Booth.

v. 3. Astronomy, by Sir B. H. Malkin. History of astronomy, by R. W. Rohman. Mathematical geography, by E. Lloyd. Physical geography, by H. J. Lloyd. Navigation, by J. Lord Wrottesley. With an explanation of scientific terms, and an index by D. Booth.

——— ——— Penny magazine. v. 1-14. 4°. *London*, 1832-45.

——— Society for the encouragement of arts, manufactures, and commerce. Adelphi, London. Catalogue of the ninth exhibition of inventions; being appendix 1 to vol. 5 of the Journal of the Society of arts. 8°. *London*, 1857.

——— ——— Report of the committee, together with the approved communications and evidence upon the same, relative to the mode of preventing the forgery of bank notes. Printed by order of the society. 8°. *London*, 1819.

——— ——— Transactions. v. 1-55. [Indices of v. 1-25 (in v. 26), 26-40 (in v. 40), 41-50 (in v. 50). v. 1 is 2d ed.; all but last vol. contain premiums offered their respective years.] 8°. *London*, 1783-1845.

LONDON—Continued.

——— Society of antiquaries. A collection of ordinances and regulations for the government of the royal household made in divers reigns, from king Edward III to king William and queen Mary. Also receipts in ancient cookery. 4°. *London*, 1790.

——— Society of arts, and institutions in union. Journal. v. 1-24, 1852-76. [v. 19-22 are entitled in addition, 'and official record of annual international exhibitions'; v. 23, simply 'The journal of the society of arts'.] 8°. *London*, 1853-76——.

——— South Kensington museum. *See* SOUTH KENSINGTON.

——— Statistical society. Journal. v. 1-38. 8°. *London*, 1839-76——.

——— Survey of metropolitan roads. By S. Hughes. *See* **Law**, H. Common roads. **Weale's series, No. 46.**

Lonely hours; a text book of knitting, by an American lady; adapted to American customs. 16°. *Philadelphia*, 1850.

Long, Allstatter & co., Illustrated catalogue of power-punches, shears, and hammers, manufactured by. 8°. *Hamilton, Ohio, n. d.*

Long, Charles A. The dry collodion process. 3d ed. 12°. *London*, 1858. pp. 31.

——— Practical photography, on glass and paper. 8°. *London*, 1854. pp. 48.

——— Same. 4th ed. 1859. To which is added a paper on the method of taking stereoscopic pictures. 8°. *London*, 1859.

Long, George. A sketch of ancient geography, and other additions to Hughes' atlas of classical geography. *See* **Hughes**, William.

Long, John H., and **Buel**, R. H. The cadet engineer; or steam for the student. 8°. *Philadelphia*, 1865.

LONGITUDE. Expériences sur les longitudes, etc. *See* **Expériences.**

——— Problem to discover longitude at sea. *See* **Locke**, R.

Loomis, Alfred L. Lessons in physical diagnosis. 8°. *New York*, 1868.

Loomis, Elias. Certain storms in Europe and America, Dec. 1836, by. **Smiths'n contrib., v. 11.**

Digitized by Google

Loomis, Elias. Elements of algebra. 8°. *New York,* 1851.

——— Elements of analytical geometry, and of the differential and integral calculus. 8°. *New York,* 1858.

——— An introduction to practical astronomy, with a collection of astronomical tables. 8°. *New York,* 1855.

——— The recent progress of astronomy especially in the United States. 12°. *New York,* 1850.

——— Tables of logarithms of numbers, and of sines and tangents for every ten seconds of the quadrant. 8°. *New York,* 1848.

——— A treatise on algebra. Rev. ed. 8°. *New York,* 1868.

——— A treatise on arithmetic; theoretical and practical. 8°. *New York,* 1856.

——— A treatise on meteorology; with a collection of meteorological tables. 8°. *New York,* 1868.

Loomis, William Isaacs. The anti-Newtonian; incidents and facts in my life. 8°. *New York,* 1869.

LOOMS, Positive self-graduating warp delivery motion, applied to. *See* **Snell,** D. W.

——— Traité des métiers à filer automates. *See* **Stamm,** E.

Loosey, Charles F. Collection of the laws of patent privileges of all the countries of Europe, the United States of North America and the Dutch West Indies. 8°. *Vienna, n. d.* [?]

Lord, David N. Geognosy, or the facts and principles of geology against theories. 8°. *New York,* 1855.

Lord, John Keast. The naturalist in Vancouver island and British Columbia. 2 v. 12°. *London,* 1866.

Lord, W. B., and **Baines,** T. Shifts and expedients of camp life, travel, and exploration. 8°. *London,* 1876.

LORD'S prayer (The), in one hundred languages. *See* **Naphegyi,** G.

Lorenz, Alfred. Praktischer Tunnelbau in seinem ganzen Umfange. Nebst Beschreibungen ausgeführter Tunnelbauten. *Illus.* 8°. *Wien,* 1860.

Lorenz, Otto. Catalogue annuel de la librairie française. *See* **Librairie** française.

——— Catalogue général de la librairie française; réd. par. *See* **Librairie** française.

Loring, F. W., and **Atkinson,** C. F. Cotton culture and the south, considered with reference to emigration. 8°. *Boston,* 1869.

Loriol, V. A. Nouveau manuel de géographie physique, historique et topographique de la France. 2e éd. 18°. *Paris,* 1836. **13 Manuels Roret.**

Loth, C. Edward. The practical stair-builder: the art of building stairs and handrails; with elementary geometry and geometrical constructions. 4°. *Troy, N. Y.,* 1868.

Loth, J. Die organische Chemie auf Grundlage methodisch geordneter Versuche für den Unterricht an höheren Lehranstalten und zur Selbstbelehrung. *Illus.* 8°. *Braunschweig,* 1876.

Lott, Ludwig. Buchdruck. *See* **Vienna. Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

Loubat, Alphonse. The American vine-dresser's guide. Rev. ed. 16°. *New York,* 1872.

Loude, L. Charles de. Surgical, operative, and mechanical dentistry: the substance of a series of lectures delivered by. Dental operations, the best means of preventing irregularities in children's teeth, stopping of teeth, the most approved constructions of artificial teeth, with various useful recipes of substances for the stopping of teeth, dentifrices, lotions, powders, etc. 8°. *London,* 1840.

Loudon, *Mrs.* Jane Webb. Cottage, farm and villa architecture and furniture; ed. by. *See* **Loudon,** J. C.

——— Villa gardener; ed. by. *See* **Loudon,** J. C.

Loudon, John Claudius. Arboretum et fruticetum Britannicum; or the trees and shrubs of Britain, native, foreign, hardy and half hardy. 8 v. 2d ed. 8°. *London,* 1844.

——— The architectural magazine and journal of improvements in architecture, building, and furnishing, and in the various arts and trades connected therewith. v. 1–5. 8°. *London,* 1834–38.

——— An encyclopædia of agriculture: comprising the valuation, transfer, laying out, improvement, and management of landed property, and of the cultivation and economy of the animal and vegetable productions of agriculture, including all the latest improvements; a general

Digitized by Google

Loudon, John Claudius—Continued.
history of agriculture in all countries; a statistical view of its present state, with suggestions for its future progress in the British isles. 3d ed. *Illus.* 8°. *London*, 1835.

——— Same. 6th ed. With supplements bringing down the work to the year 1844. *Illus.* 8°. *London*, 1866.

——— An encyclopædia of cottage, farm, and villa architecture and furniture. Ed. by Mrs. Loudon. *Illus.* 8°. *London*, 1846. New ed., 1863.

——— An encyclopædia of gardening: comprising horticulture, floriculture, arboriculture, and landscape gardening. New ed. *Illus.* 8°. *London*, [1834].

——— Encyclopædia of plants. Ed. by Mrs. Loudon, assisted by George Don and David Wooster. 8°. *London*, 1866.

——— The gardener's magazine and register of rural and domestic improvement; conducted by. New series, v. 1-9. 8°. *London*, 1835-43.

——— The horticulturist; an attempt to teach the science and practice of the culture and management of the kitchen, fruit, and forcing garden, etc. 8°. *London*, 1860.

——— Hortus lignosus Londinensis; a catalogue of all the ligneous plants, indigenous and foreign, hardy and half-hardy, cultivated in the gardens and grounds in the neighbourhood of London. With all their synonymes, scientific and popular; including their French, German, and Italian names, with their native country, habit, habitation in the garden, etc. 8°. *London*, 1838.

——— Landscape gardening and landscape architecture; ed. by. *See* **Repton,** H.

——— The suburban gardener and villa companion; containing the choice of a suburban or villa residence, or of a situation on which to form one; the arrangement and furnishing of the house, and the laying out, planting, and general management of the garden and grounds. 8°. *London*, 1838.

——— A treatise on forming, improving and managing country residences, and on the choice of situations appropiate to every class of purchasers. 2 v. 4°. *London*, 1806.

——— The villa gardener: comprising the choice of a suburban villa residence: the laying out, planting, and culture of the garden and grounds, and the management of the villa farm, including the dairy and poultry yard. Ed. by Mrs. Loudon. 2d ed. *Illus.* 8°. *London*, 1850.

LOUISVILLE. Edward's annual director to the inhabitants, institutions, business firms, etc. For 1865-1866. 8°. *Louisville*, 1865.

——— Haldeman's picture of Louisville; directory and business advertiser. For 1844-1845. 8°. *Louisville*, 1844.

Love, Thomas. The art of cleaning, dyeing, scouring, and finishing, in the most approved English and French methods. 2d ed. 8°. *London*, 1855. 2d Am. ed., *Philadelphia*, 1869.

Lovell, M. S. The edible mollusks of Great Britain and Ireland, with recipes for cooking them. 12°. *London*, 1867.

LOVELL'S island, Sea wall on. By Col. S. Thayer. *See* UNITED STATES. **Papers** on engineering.

Low, David. Elements of practical agriculture, comprehending the cultivation of plants, husbandry of domestic animals, and economy of the farm. 2d ed. 8°. *London*, 1838.

Low, James W., *jr.* Railway directory for 1858, containing a list of all the officers and directors of the railroads in the United States and Canadas. 12°. *New York*, 1858.

Low, Sampson. The British catalogue of books published from Oct. 1835, to Dec. 1853, containing the date of publication, size, price, publisher's name, and edition. v. 1. General alphabet. v. 2. Index, 1837-1857. 8°. *London*, 1853-58.

——— The English catalogue of books published from January, 1835, to January, 1863, comprising the contents of the 'London' and the 'British' catalogues, and the principal works published in the United States of America and continental Europe, with the dates of publication, in addition to the size, price, edition and publisher's name. 8°. *London*, 1864.

Lowe, E. J. Beautiful leaved plants; a description of the most beautiful leaved plants in cultivation in this country; to which is added an extended catalogue; by E. J. Lowe, assisted by W. Howard. *Illus.* 8°. *London*, 1866.

Digitized by Google

Lowe, E. J. Practical use of instruments. *See* **Young,** J. R., and others. **Orr's circle of the sciences, v. 5.**

Lowe, N. M. Report on wood industries. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 4.**

LOWELL. Hydraulic experiments. *See* **Francis,** J. B.

——— Measurement of water power at. *See* **Francis,** J. B., and **Baldwin,** J. F.

——— Middlesex mechanic association. Catalogue of the library. *See* **Middlesex** mechanic association.

——— ——— Reports of the first exhibition, held in the city of Lowell, Sept. 1851. *See* **Middlesex** mechanic association.

Löwenthal, J. Leistungen der Statistik. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Lower, Mark Antony. Patronymica Britannica; a dictionary of family names of the United Kingdom. roy. 8°. *London*, 1860.

LOWERING. Abridgments English Patents, No. 31.

Löwig, Karl Jakob. Chemie der organischen Verbindungen. 2 v. 8°. *Zürich und Braunschweig*, 1845–46.

——— Principles of organic and physiological chemistry. Transl. by Daniel Breed. 8°. *Philadelphia*, 1853.

Lowndes, Charles S. The engineer's handbook. 12°. *London*, 1860.

Lowndes, William Thomas. The bibliographer's manual of English literature; containing an account of rare, curious, and useful books, published in, or relating to Great Britain and Ireland, from the invention of printing; with bibliographical and critical notices, collations of the rarer articles, and the prices at which they have been sold in the present century. New ed. rev. by Henry G. Bohn. Parts 1-10 and appendix. [Bound in 6 v.] sm. 8°. *London*, 1857–60.

Lowthorp, John. Philosophical transactions to 1700; abridged by. *See* LONDON. **Royal** society.

Löwy, Josef, **Leib,** F., and **Schwerdtner,** J. Photographie. Decorations-Zeichnungen. Graveur- und Guillochirarbeiten. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 12.**

Loyd, E. Treatise on mathematical geography. LONDON. **Society of useful knowledge, v. 3.**

Loyd, H. J. Treatise on physical geography. LONDON. **Society of useful knowledge, v. 3.**

Lubbock, *Sir* John. Modern savages. *See* **Science lectures for the people, series 6.**

——— Natural history review; ed. by. *See* **Natural** history.

——— Prehistoric times; as illustrated by ancient remains, and the manners and customs of modern savages. 8°. *London and Edinburgh*, 1865.

Lubbren, F. M. Directions for making maps, adapted to the use of schools. 24°. *Philadelphia*, 1851. pp. 32.

LUBRICANTS. Abridgments English Patents, No. 27.

LUBRICATION. Schmiermittel der Eisenbahnwagen. *See* **Heusinger von Waldegg,** E.

——— Schmiermittel und Schmiervorrichtungen der Dampfmaschinen. *See* **Rabe,** Alexander.

Lucas. Encyklopädie der Landwirthschaft; bearbeitet von. *See* **Schnee,** G. H.

Lucas, Eduard. Abbildungen württembergischer Obstsorten. Eine Sammlung vorzüglicher Apfel- und Birnsorten. 4°. *Stuttgart*, 1858.

——— Der Cider oder Obstwein. Kurze Zusammenstellung der verschiedenen Bereitungsarten. 8°. *Ravensburg*, 1869. pp. 51.

——— Kurze Anleitung zum Obstdörren und zur Muszbereitung. 8°. *Ravensburg*, 1869. pp. 40.

——— Kurze Anleitung zur Obstkultur. 8°. *Ravensburg*, 1866.

——— Taschenbuch, für Pomologen, Gärtner und Gartenfreunde. 5ter und 7ter Jahrg. 1865, 1867. 12°. *Ravensburg*, 1865–67.

——— Verhandlungen der 5ten allgemeinen Versammlung deutscher Pomologen, Obst- und Weinzüchter, in Reutlingen, vom 24-27. September 1867. 8°. *Ravensburg*, 1868.

Lucas, George Oakley. The slide-ruler's guide. A treatise on the use of the artificer's common slide-rule. 12°. *London*, 1828. pp. 40.

Luce, Stephen B. Seamanship; illustrated with numerous original and selected de-

Digitized by Google

Luce, Stephen B.—Continued.
signs. 2 pts. 2d ed. 8°. *Newport, R. I.,* 1863.

Lucien, Henry Montanell. Hints on illuminating: with an essay on the art of ornamenting in gold or metals. 6th ed. 18°. *London, n. d.*

Luckombe, P. The history and art of printing. 8°. *London,* 1771.

Lucotte. Art de la maçonnerie. PARIS. **Acad. roy. des. sc.; arts et métiers, v. 14.**

Ludlow, J. L. A manual of examinations in anatomy, physiology, surgery, and the practice of medicine. 12°. *Philadelphia,* 1857.

Ludlow, Nicol. Report on star torpedoes. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Ludowig, Heinrich. Die Bierbrauerei aus Kartoffeln. *Illus.* 8°. *Weimar,* 1848. **164 Neuer Schauplatz der Künste.**

—— Handbuch der Bleiweiss- und Bleizuckerfabrication nach allen vorhandenen Methoden. *Illus.* 8°. *Weimar,* 1847. **155 Neuer Schauplatz der Künste.**

Ludwig, Bernhard, **Kohn,** Carl, and **Flattich,** Wilhelm. Möbeltischlerei. Korbflechterei. Bautischlerei. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 8.**

Luedersdorff, F. The solution and reproduction of india-rubber, etc. Transl. by James B. Angell. 8°. *Berlin,* 1832. pp. 48.

Luhme, J. F., & co., Catalogue of chemical and philosophical apparatus and instruments, etc., sold by. 8°. *New York,* 1854. pp. 7.

—— Catalogue of scientific apparatus and instruments, sold by. 8°. *New York,* 1855. pp. 36.

Lukis, William C. Account of church bells, with some notices of Wiltshire bell-founders. 8°. *London and Oxford,* 1857.

LUMBER dealer's assistant, The. *See* **Sutherlin,** George S.

Lumberman's (The) assistant; containing a number of tables determining accurately the cubical and superficial contents of any square or unequal log of hewed timber, or plank from 1 to 47 inches. 8°. *Philadelphia,* 1861.

Lumière (La). Collection du journal. *See* **Collection.**

Lund, Henry. A treatise on the substantive law relating to letters patent for inventions. 12°. *London,* 1851.

LUND. University. Acta Universitatis Lundensis. Lunds Universitets Års-Skrift för År 1868–1870. 4° *Lund,* 1868–70.

Lunge, Georg. Die Destillation des Steinkohlentheers und die Verarbeitung der damit zusammenhängenden Nebenproducte. 8°. *Braunschweig,* 1867.

—— Zur Frage der Ventilation, mit Beschreibung und Abbildung des 'minimetrischen' Apparates zur Bestimmung der Luftverunreinigung. Vortrag, gehalten in Zürich am 18. Januar 1877. 8°. *Zürich,* 1877. pp. 47.

LUNGS, Functions of the. *See* **Fitch,** Samuel Sheldon.

Lützow, Carl von. Kunst und Kunstgewerbe auf der Wiener Weltausstellung, 1873. Unter Mitwirkung von H. Auer, Br. Bucher, R. v. Eitelberger, A. v. Enderes, Jakob Falke, Josef Langl, Fr. Lippmann, Br. Meyer, Mor. Thausing, A. Waltmann und Anderer hrsg. von. *Illus.* imp. 8°. *Leipzig,* 1875.

Lyell, Charles. The geological evidences of the antiquity of man. With remarks on theories of the origin of species by variation. *Illus.* 8°. *London,* 1863.

—— Lectures on geology, delivered at the Broadway tabernacle, New York. 2d ed. rev., with a general introduction: to which is added a sketch of a lecture on the different races of men, by J. Augustine Smith. Reported for the New York Tribune, by H. J. Raymond. 8°. *New York,* 1843.

—— A second visit to the United States of North America. 2 v. 12°. *New York,* 1850.

—— Travels in North America, in the years 1841–2: with geological observations on the United States, Canada and Nova Scotia. 2 v. [in 1]. 12°. *New York,* 1852.

Lyman, Joseph B. Cotton culture; with an additional chapter on cotton seed, and its uses, by J. R. Sypher. 12°. *New York,* 1868.

Lynch, William F. Narrative of the United States' expedition to the river Jordan and the Dead Sea. *Maps and illus.* 8°. *Philadelphia,* 1849.

Digitized by Google

Lynden van Hemmen, F. G. van. Verhandeling over die Droogmaking van de Haarlemmer-Meer. 8°. *Amsterdam,* 1821.

Lyon, Lucius. Lightning conductors; compiled by. *See* **Harris,** W. S.

Lyon, Patrick. New and improved tables; with the method of their application to finding the mean heights of cross sections, and cubic contents of excavations and embankments. 8°. *Philadelphia,* 1853. pp. 43.

Lyons, Samuel. Our vulgar tongue; a lecture on language in general, with a few words on Gloucestershire in particular. 8°. *London,* 1868.

LYONS. La société impériale d'agriculture, Annales des sciences physiques et naturelles, d'agriculture et d'industrie, publiées par. 1e série, T. 1-11, 1838-48. 2e série, T. 1-7, 1849-55. 8°. *Lyon,* 1838-55.

——— Les eaux de Lyon et de Paris. *See* **Dumont,** A.

M*,** M. Mémoire sur la machine écossaise à battre les grains; et description d'une machine inventée en Russie, en 1823, pour le même objet, par MM. le prince Gagarin et Molard aîné. 8°. *Paris,* 1824. pp. 36.

MacAdam, James. Resources of Ireland. *See* **Sproule,** J.

McBride, David. The art of tanning and currying leather; with an account of all the different processes made use of in Europe and Asia for dying leather red and yellow. Collected and published at the expense of the Dublin society. Also a new method of tanning. 18°. *London,* 1780.

McBride, James. Catalogue of McBride library and cabinet. 12°. *Hamilton, Ohio,* 1860. pp. 38.

McCarthy, D. E. Setting of the slide valve and the link motion. *Illus.* 32°. *Boston,* 1866. pp. 36.

McClellan, George B. Report of the secretary of war communicating the report of Captain George B. McClellan, one of the officers sent to the seat of war in Europe in 1855 and 1856. 4°. *Washington,* 1857.

McClenachan, R. Tables of sterling money, reduced to United States currency, at rates of exchange on London from 107 to 112 per cent. 8°. *New York,* 1869.

McClintock, Francis L. The voyage of the 'Fox' in the arctic seas: a narrative of the discovery of the fate of Sir John Franklin and his companions. *Illus.* 8°. *London,* 1859.

McClintock, John, and **Strong,** James. Cyclopædia of biblical, theological, and ecclesiastical literature. roy. 8°. *New York,* 1867.

Macco, Heinrich, and **Jasper,** O. Reiseskizzen aus den Vereinigten Staaten von Nordamerika, mit besonderer Berücksichtigung der Eisenindustrie. Zwei Vorträge gehalten am 22. October 1876. 8°. *Siegen,* 1877.

McCormick, Cyrus H. Application for extension of his patent. *See* UNITED STATES. **Interior** dept. Patent office.

——— Argument in opposition to the extension of patent for reaping machine. *See* **Lawrence,** D. C., and **Fenwick,** R. W.

——— Opinion in the matter of application for an extension of patent for reaping machines. *See* **Holt,** Joseph.

——— Supreme court of the United States. No. 34. Cyrus H. McCormick, appellant, vs. Waite Talcott, Ralph Emmerson, Jesse Blinn, and Sylvester Talcott, survivors of John H. Manny. 8°. *Washington,* 1857. [2 copies.]

——— vs. Manny and others. Opinion of Mr. Justice McLean. *See* **McLean,** J.

McCoy, —. The home book. *See* **Valentine,** R.

McCoy, Frederick. Catalogue of the Victorian exhibition, 1861. *See* **Archer,** W. H.

McCulloch, John Ramsey. A dictionary, practical, theoretical, and historical of commerce and commercial navigation. Ed. by Henry Vethake. 2 v. 8°. *Philadelphia,* 1845.

——— Same. Illustrated with maps, and supplement. 1 v., 1854. Also, ed. 1859.

——— Essay on commerce. *See* **Waterston,** William. Cyclopædia of commerce.

——— Universal gazetteer; a dictionary, geographical, statistical, and historical of the various countries, places, and principal natural objects in the world. Articles relating to the United States, by Daniel Haskel. *Illus.* 2 v. 8°. *New York,* 1847.

——— Wealth of nations: with a life of the author, notes, etc., by. *See* **Smith,** Adam.

Digitized by Google

McCulloh, R. S. Report of scientific investigations relating to the chemical nature of saccharine substances, and the art of manufacturing sugar. *n. t. p. See* UNITED STATES. **Treasury** department.

McCurdy, J. R. Dental news letter; ed. by. *See* **Dental** news letter.

McDermott, J., and co. Table of weights of grindstones, and rules for computing weights. 12°. *Cleveland, O.*, 1865. pp. 5.

McDonnell, R. Natural history review; ed. by. *See* **Natural** history.

Mace, Jean. The history of a mouthful of bread, and its effect on the organization of men and animals. Transl. from 8th French ed. by Mrs. Alfred Gatty. 12°. *New York*, 1866.

——— The little kingdom or the servants of the stomach. A new series of letters to the young on the life of man and animals. Transl. by a lady. 2 v. 16°. *London*, 1867.

Macedo, Joaquim Manuel de. Brazilian biographical annual, 1876. 3 v. 8°. *Rio Janeiro*, 1876.

McElrath, Thomas. Mining magazine; ed. by. *See* **Mining.**

McElroy, Archibald. Philadelphia directory for 1855; containing, also, the names of housekeepers and persons in business in Bridesburg, Frankford, Germantown, Manayunk, Pa., etc., and Camden, N. J. 18th ed. 8°. *Philadelphia*, 1855. Also for 1861, '63, '65, '66, '67.

McFarland, R. W. Aeneid and Bucolics; ed. by. *See* **Virgilius.**

Macfarlane, Robert. History of propellers and steam navigation; with biographical sketches of the early inventors. 12°. *New York*, 1851.

Macfie, Robert Andrew. The patent question under free trade; a solution of difficulties by abolishing or shortening the inventors' monopoly, and instituting national recompenses. To which are added translations of recent contributions to patent reform by M. Chevalier and others. 8°. *London*, 1863.

Macgregor, John. The commercial and financial legislation of Europe and America, with a pro-forma revision of the taxation and the customs tariff of the United Kingdom. 8°. *London*, 1841.

——— Commercial statistics: a digest of the productive resources, commercial legislation, custom tariffs, navigation, port and quarantine laws; and charges, shipping, imports and exports, and the monies, weights, and measures of all nations: including all British commercial treaties with foreign states. With supplement. v. 1–5. *London*, 1844.

——— The language of specifications of letters patent for inventions; with the authorities and decisions in all the important cases. 8°. *London*, 1856.

Machard, H. Traité complet de vinification. 8°. *Besançon*, 1845.

MACHINERY. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

——— Bewegungs-Mechanismen. *See* **Redtenbacher,** F.

——— The British machinist. *See* **Nicholson,** J.

——— Catalogue of machines manufactured by the Patent frictional gearing co. *See* **Frictional** gearing co.

——— Civil engineering and. By H. Henman. *See* **Lectures** on the results of the exhibition.

——— Composition des machines. *See* **Lanz** and **Bétancourt.**

——— Composition des machines employées dans les constructions diverses, etc. *See* **Borgnis,** J. A.

——— Constructeur. *See* **Reuleaux,** F.

——— Construction of. *See* **Warr,** G. F.

——— Construction of hoisting. *See* **Glynn,** J. **Weale's series, No. 33.**

——— Dictionary of machines. *See* **Appleton's.**

——— Le diverse ed artificiose machine. *See* **Rammelli,** A.

——— Economy of. *See* **Babbage,** C.

——— Elemente von Maschinen. *See* **Kohl,** F.

——— Essay on the construction of machines. *See* **Lanz** and **Bétancourt.**

——— Essays on millwork and other machinery. *See* **Buchanan,** R.

——— Examples of machines. *See* **Rennie,** G.

——— Grundsätze der Werkzeugswissenschaft. *See* **Verdam,** G. I. **66-68 Neuer Schauplatz der Künste.**

——— Imperial cyclopædia of. *See* **Johnson,** William.

——— Lehrbuch der Maschinen-Mechanik. *See* **Weisbach,** J.

Digitized by Google

MACHINERY. Machines and tools used for working in metal, etc. By R. Willis. *See* **Lectures** on the results of the exhibition.

——— Machines et inventions approuvées par l'Académie royale. *See* PARIS. **Académie des sciences.**

——— Manual of machinery and millwork. *See* **Rankine,** William John Macquorn.

——— Maschinen zur Appretur, Färberei und Bleicherei. *See* **Meissner,** G.

——— Maschinen zur Bearbeitung des Holzes. *See* **Schmidt,** R.

——— Maschinenbau. *See* **Redtenbacher,** F.

——— Maschinenbauer. *See* **Le Blanc. 143-145, 196 Neuer Schauplatz der Künste.**

——— Maschinenfabrication. *See* **Reiche,** H. v.

——— Maschinenkunde und Zeichnung. *See* **Haindl,** S.

——— Mechanical inventor's guide. *See* **Wylson,** J.

——— Mechanics' magazine. *See* **Mechanics' magazine.**

——— Mechanics of. *See* **Weisbach,** J. **Library of illustrated standard scientific works, v. 2 and 5.**

——— Novo teatro di machine. *See* **Zonca** Vittorio.

——— Power of machines. *See* **Banks,** J.

——— Praktischer Maschinenbauer. *See* **Demme,** Andr. Valent.

——— Prinzipien des Maschinenbaues. *See* **Redtenbacher,** F.

——— Progress of machinery and manufactures in Great Britain. *See* **Progress.**

——— Progress of machinery and manufactures in Great Britain, exhibited in letters patent. **Weale's papers on engineering, v. 5.**

——— Railway. *See* **Clark,** D. K.

——— Report on. By R. H. Thurston. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 3.**

——— Report on the machinery of the industrial arts, etc. By F. A. P. Barnard. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 3.**

——— Resultate für den Maschinenbau. *See* **Redtenbacher,** F.

——— Rules and tables relating to machines. *See* **Rankine,** William John Macquorn.

——— Théorie des mécanismes. *See* **Laboulaye,** C. P. L.

MACHINERY. Traité des machines. *See* **Hachette,** J. N. P.

——— Treatise of the machinery of Great Britain. *See* **Barlow,** P.

MACHINIST. Führer des Maschinisten. *See* **Scholl,** E. F.

MACHINIST'S assistant, Engineer and. *See* **Scott,** D.

——— drawing book, Engineer and. *See* **Le Blanc.**

MACHINISTS and engineers, Modern practice of American. *See* **Watson,** Egbert P.

McIntosh, Charles. The greenhouse, hot house and stove; including lists of the most beautiful species of exotic flowering plants and directions for their cultivation. 12°. *London,* 1838.

Mackall, Leonard. American Journal of dental science. *See* **American** journal, etc.

Mackellar, Thomas. The American printer: a manual of typography, containing instructions for beginners, as well as directions for managing all departments of a printing office; with tables, schemes for imposing forms in every variety, hints to authors and publishers, etc., etc. 12°. *Philadelphia,* 1868.

McKennie, M. Manufacture and distillation of alcoholic liquors; transl. by. *See* **Duplais,** *aîné et jeune.*

Mackenzie, George. Manual of the weather for the year 1830. 12°. *Edinburgh,* 1829.

Mackenzie, Morell. The use of the laryngoscope in diseases of the throat, with an essay on hoarseness and loss of voice. Additions by J. Solis Cohen. 2d ed. 8°. *Philadelphia,* 1869.

Mackenzie, William. A practical treatise on the diseases of the eye. Introduction by F. W. Jones. Ed. from 4th Lond. ed. by A. Hewson. roy. 8°. *Philadelphia,* 1855.

Mackenzie's ten thousand receipts, in all the useful and domestic arts; constituting a complete and practical library. Carefully revised and rewritten by a corps of experts. roy. 8°. *Philadelphia,* 1866.

Mackintosh, James, **Forster,** J., and **Courtenay,** T. P. Lives of eminent British statesmen. v. 1-7. 16°. *London,* 1831-37. **Lardner's cabinet cyclopædia, Nos. 76-82.**

Digitized by Google

Mackintosh, James, **Wallace,** W, and **Bell,** R. The history of England. 1 v. 16°. *London,* [1834]. **Lardner's cabinet cyclopædia, v. 3-12.**

McLean, John. In the circuit court of the United States in the northern district of Illinois. Cyrus H. McCormick vs. John H. Manny and others. Opinion of Mr. Justice McLean. 8°. *Philadelphia,* 1856. pp. 19.

McLeod, T. H. Instrumental calculation; a treatise on the sliding rule. 32°. *Middlebury,* 1846.

McMinn, J. M. Varieties of grape vine, etc. *See* **Both** sides of the grape question.

McMullen, Lewis. Tables showing the value of British sterling from $1.50 to $7.50 the pound. 8°. *New York,* 1852. pp. 40.

Macneill, John. Report on the atmospheric railway. *See* **Weale's papers on engineering, v. 2.**

McNicoll, David H. Dictionary of natural history terms, with their derivations, including the various orders, genera, and species. 8°. *London,* 1863.

Macoy, Robert. Cyclopedia of freemasonry; containing definitions of the technical terms used by the fraternity, with an account of the rise and progress of freemasonry and its kindred associations, ancient and modern. 2d ed. 8°. *New York,* 1867.

McPherson, Edward. A hand book of politics for 1872; a record of important political action, national and state, from July 15, 1870, to July 15, 1872. 4th ed. 8°. *Washington,* 1872.

—— Same. From July 15, 1872, to July 15, 1874. 8°. *Washington,* 1874.

Macquer, Pierre Joseph. Art de la teinture en soie. PARIS. **Acad. des sc.; arts et métiers, v. 29.**

Macrory, Edmund. Reports of cases relating to letters patent for inventions: decided in the courts of law and equity, and before the judicial committee of the privy council; with notes of applications for amendments, leave to enter disclaimers, etc. Pts. 1, 2. *London,* 1855-57.

Madinier, M. Paul. Annales de l'agriculture des colonies et des régions tropicales. T. 1, 2. 8°. *Paris,* 1860-61.

Magazine (The) of domestic economy. v. 1-4. 8°. *London,* 1836-39.

Magazine (The) of horticulture. *See* **Hovey,** C. M.

—— (The) of popular science, and journal of the useful arts. v. 2-4: 8°. *London,* 1836-37.

—— of science, and school of arts: intended to illustrate the most useful, novel and interesting parts of natural history, and experimental philosophy, artistical processes, ornamental manufactures, and the arts of life. v. 1-15. 8°. *London,* 1840-52.

MAGIC, Natural. *See* **Porta,** John Baptista.

—— oracle, or the black art made easy. A clear explanation of the wonderful feats and hocus pocus deceptions of the most renowned magicians, wizards, and prestidigitateurs. By a professor of magic. 24°. *Boston,* 1868.

Magne, J. H. Choix des vaches laitières, ou description de tous les signes à l'aide desquels on peut apprécier les qualités lactifères des vaches. 18°. *Bruxelles,* 1850.

MAGNESIUM. The new metal magnesium for illuminating purposes; manufactured by the American magnesium co. 12°. *Cambridge,* 1865. pp. 14.

MAGNETISM. Abridgments English Patents, No. 15.

—— Abstracts of magnetical observations. *See* TORONTO, Canada.

—— Abstracts of researches on. *See* **Reichenbach,** K. von.

—— Animal. *See* **Ashburner,** John.

—— —— or psycodunamy. *See* **Leger,** Theodore.

—— Annals of electricity, magnetism and chemistry. *See* **Sturgeon,** W.

—— Darstellung des Magnetismus. *See* **Roget,** P. M.

—— Discussion of the magnetical and meteorological observations made at Girard college in 1840-45. By A. D. Bache. **Smiths'n contrib., v. 11.**

—— Étude de magnétisme et de l'électromagnétisme. *See* **Du Moncel,** Th.

—— Journal of a voyage to Australia, etc., for magnetical research. *See* **Scoresby,** W.

—— Magnetic attractions and the laws of magnetism. *See* **Barlow,** P.

—— Magnetical investigations. *See* **Scoresby,** W.

Digitized by Google

MAGNETISM. Magnetical observations in the arctic seas. By E. K. Kane. Reduced by C. A. Schott. **Smiths'n contrib., v. 10.**

——— Magnetische und elektrische Apparate. Von A. v. Wattenhofen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

——— Magnetismus. *See* **Zimmermann**, W. F. A. B. I, Handbuch der Physic.

——— Manual of. *See* **Davis**, D. J.

——— Manual of. *See* **Lardner**, D., and **Walker**, C. V. **Lardner's cabinet cyclopædia, v. 108-109.**

——— Manual of electricity, etc. *See* **Noad**, Henry M.

——— Observations on terrestrial. By J. Locke. **Smiths'n contrib., v. 3.**

——— Observations on terrestrial magnetism in Mexico. By A. Sonntag. **Smiths'n contrib., v. 11.**

——— of ships, and the deviations of the compass. By T. A. Jenkins. *See* UNITED STATES. **Navy** department.

——— Rudimentary. *See* **Harris**, W. S., and **Noad**, H. M.

——— Scientific researches in. *See* **Sturgeon**, W.

——— Terrestrial. By E. Sabine. *See* **Herschel**, J. F. W. **Manual of scientific enquiry.**

——— Traité d'électricité et magnétisme. *See* **Becquerel**, A. C. and A. E.

——— Treatise on. By P. M. Roget. *See* LONDON. **Society of useful knowledge, v. 2.**

——— Treatise of artificial magnets. *See* **Michell**, J.

——— Untersuchungen über den Erdmagnetismus in Nord-Deutschland u. s. w. *See* **Lamont**, J.

——— Untersuchungen über den Erdmagnetismus im südwestlichen Europa. *See* **Lamont**, J.

MAGNETO-electricity. Neue electrische Maschinen, insbesondere die magnet-electrischen. *See* **Ries**, Paul.

Magnus, G. Mémoire sur la déviation des projectiles dans l'air; suivi d'un appendice relatif à un phénomène observé dans le mouvement gyratoire des corps. Traduit de l'allemand par L. Delobel. 8°. *Liége*, 1852.

Magnus, Philip. Lessons in elementary mechanics. 2d ed. 18°. *London*, 1875.

Mahan, Asa. Science of moral philosophy. 16°. *Oberlin*, 1848.

Mahan, Asa. A system of intellectual philosophy. 2d ed. rev. 12°. *New York*, 1854.

Mahan, Dennis H. An elementary course of civil engineering. *Illus.* 5th ed. 8°. *New York*, 1851. Also ed. 1868.

——— An elementary course of military engineering. Part 2. Permanent fortifications. 8°. *New York*, 1867.

——— Industrial drawing: comprising the description and uses of drawing instruments, the construction of plane figures, the projections and sections of geometrical solids, architectural elements, mechanism and topographical drawing. *Illus.* 8°. *New York*, 1852.

Maier, Julius. Die aetherischen Oele: Ihre Gewinnung, chemischen und physikalischen Eigenschaften, Zusammensetzung und Anwendung. 8°. *Stuttgart*, 1862.

Maignan, Emmanuele. Perspectiva horaria; sive de horographia gnomonica, tum theoretica, tum practica, libri quatuor. fol. *Romæ, Anno Jubilei*, 1725.

MAILS, Her majesty's, England. *See* **Lewins**, William.

——— The ocean post. *See* **Rainey**, Thomas.

Main, James. The villa and cottage florist's directory: a treatise on floriculture, particularly the management of the best stage, bed and border flowers usually cultivated in Britain. To which is added directions for the management of greenhouse, hot-house and conservatory. 2d ed. 16°. *London*, 1835.

Main, Robert. Manual of scientific enquiry; ed. by. *See* **Herschel**, J. F. W.

Main, Thomas J., and **Brown**, Thomas. The indicator and dynamometer, with their practical applications. 8°. *London*, 1847. pp. 43. Also 2d ed., 1850.

——— The marine steam engine. 3d ed. 8°. *London*, 1855.

MAINE. History of New England. Maine. *See* **Coolidge**, Austin J.

——— The water power of. *See* **Wells**, Walter.

——— The water power of. Reports of the commissioners and secretary of the hydrographic survey of 1867. Part 1. Report of commissioners. Part 2. Report of secretary. 8°. *Augusta*, 1868.

MAIOLICA. *See* **Fortnum**, C. Drury E. **South Kensington art and science handbooks, No. 4.**

Digitized by Google

Mairan, Mr. de. Traité physique et historique de l'aurore boréale. 4°. *À Paris,* 1733.

Maison rustique du 19e siècle, contenant les meilleures méthodes de culture usitées en France et à l'étranger, etc., [ouvrage] terminé par des tables méthodique et alphabétique; rédigé et professé par une réunion d'agrinomes et de practiciens appartenant aux sociétés agricoles de France, sous la direction du Dr. Alexandre Bixio. T. 1–5. T. 1. Agriculture proprement dite. T. 2. Cultures industrielles et animaux domestiques. T. 3. Arts agricoles. T. 4. Agriculture forestière, législation et administration rurale. T. 5. Horticulture. [T. 5 is the 2d ed., edited by Ysabeau and Bixio.] *Illus.* 8°. *Paris,* 1844.

——— rustique du 19e siècle, Journal d'agriculture; 2e partie de la. *See* **Journal** d'agriculture.

Maistre, Joseph de. Essay on the generative principle of political constitutions. 12°. *Boston,* 1847.

MAIZE, or Indian corn. *See* **Salisbury,** J. H.

Major, J. R. Journal of the Photographic society; ed. by. *See* LONDON. **Photographic society.**

Makins, George Hogarth. A manual of metallurgy, more particularly of the precious metals, including methods of assaying them. *Illus.* 8°. *London,* 1862.

Malaguti, F. Cours de chimie agricole professé en 1859. 12°. *Rennes,* 1859.

MALAY archipelago, The. *See* **Wallace,** Alfred Russel.

Malberg, August. Die Literatur des Bau- und Ingenieurwesens der letzten 30 Jahre, oder Verzeichniss der vornehmlichsten Werke in deutscher, französischer, englischer, italienischer, holländischer u. s. w. Sprache, welche die genannten Fächer betreffen. 8°. *Berlin,* 1852.

Malcolm, Howard. Theological index. References to the principal works in every department of religious literature, embracing nearly seventy thousand citations, alphabetically arranged under two thousand heads. 8°. *Boston and London,* 1868.

Malcolm, John George. Law of evidence; ed. by. *See* **Starkie,** T.

Malepeyre, F. Arts of tanning, currying, and leather dressing. *See* **Julia de Fontenelle,** J. S. E., and **Malepeyre,** F.

Malepeyre, F. Manuel du boulanger, etc. *See* **Benoit,** P. M. N., **Julia de Fontenelle,** J. S. E., and **Malepeyre,** F. **34 Manuels Roret.**

——— Treatise on perfumery, by. *See* **Pradal,** F., and **Malepeyre,** F.

Malepeyre, M. F. Le technologiste; ed. by. *See* **Technologiste.**

Malézieux, M. Travaux publics des États-Unis d'Amérique en 1870. Texte et atlas, 4°. *Paris,* 1873.

Malgaigne, J. F. A treatise on fractures. Transl. from the French, with notes and additions, by John H. Packard. 8°. *Philadelphia,* 1859.

Malkin, Benjamin H. Treatise on astronomy. *See* LONDON. **Society of useful knowledge, v. 3.**

Mallet, Alfred. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

Mallet, Robert. Application of the atmospheric system to railways. *See* **Weale's papers on engineering, v. 2.**

——— Application of water power. *See* **Weale's papers on engineering, v. 6.**

——— Arnollet's system of atmospheric railways; transl. by. *See* **Weale's papers on engineering, v. 5.**

——— Constructing and working atmospheric railways. *See* **Weale's papers on engineering, v. 4.**

——— Earthquake phenomena. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.

——— The first principles of observational seismology; report to the Royal society, of the expedition into the interior of the kingdom of Naples to investigate the circumstances of the great earthquake of Dec. 1857. 2 v. roy 8°. *London,* 1862.

——— The physical conditions involved in the construction of artillery, with the relative and absolute values of the materials employed; and some hitherto unexplained causes of the destruction of cannon in service. 4°. *London,* 1856.

Malouin, Paul Jacques. Arts du meunier, du vermicellier et du boulanger par. PARIS. **Acad. des sc.; arts et métiers, v. 41 and 1.**

Malpertuis, Étienne. Littérature et beaux-arts. *See* **Écho** de la littérature.

MALT. Malzbereitung und Bierfabrikation. *See* **Thausing,** Julius E.

Digitized by Google

Malus, Étienne Louis. Biography. *See* **Arago**, D. F. J. **Biography** of scientific men.

Maly, Joseph Carl. Nachträge zu Maly's Enumeratio plantarum phanerogamicarum imperii Austriaci. *See* **Neilreich**, A.

Maly, Richard. Jahres-Bericht über die Fortschritte der Thier-Chemie. B. 4–6, 1874–76. 8°. *Wiesbaden*, 1875–77——.

MAMMALS, Geographical distribution of. By P. L. Sclater. **Science lectures for the people, series 6.**

MAN and nature. *See* **Marsh**, G. P.

——— and the conditions that surround him, his progress and decline, past and present. 12°. *New York*, 1867.

——— Indigenous races of the earth. *See* **Nott**, J. C., and **Gliddon**, George R.

——— Man's place in nature. *See* **Huxley**, T. H.

——— The origin and antiquity of physical man. *See* **Tuttle**, Hudson.

——— The physiology of man. *See* **Flint**, Austin J.

——— Testimony of modern science to the unity of mankind. *See* **Cabell**, J. L.

——— Types of mankind. *See* **Nott**, J. C., and **Gliddon**, George R.

MANAGER'S assistant; a treatise on cotton manufacture. *See* **Snell**, Daniel W.

MANAYUNK, Pa. Directory for 1855. *See* **McElroy**, A. Philadelphia directory.

Manby, Charles. Manufacture of rotating chambered breech fire-arms; abstract of discussion by. *See* **Colt**, Samuel.

——— National defences; ed by. *See* **Bidder**, G. P., *jr.*

MANCHESTER. Free library. Catalogue of the books in the reference department. Prepared by A. Crestadoro. 8°. *London*, 1864.

——— Literary and philosophical society. Catalogue of books in the library. Francis Nicholson, librarian. 8°. *Manchester*, 1875.

——— ——— Memoirs. 2d series, v. 9–15. 3d series, v. 1–5. 8°. *London*, 1851–76——.

——— ——— Procéedings. Session 1873–74, 1875–76. v. 13–15. 8°. *Manchester*, 1874–76——.

——— photographic society, Journal of. *See* **Photographic** notes.

——— Public free libraries. Annual reports, 8th–24th, to the council of the city of Manchester on the working of the public free libraries. 8°. *Manchester*, 1860–76.

——— ——— Index catalogue of the Ancoats lending branch. 8°. *Manchester*, 1872.

——— ——— Index catalogue of the chief lending library at Campfield. 8°. *Manchester*, 1870.

——— ——— Index catalogue of the Chorlton and Ardwick lending branch. 8°. *Manchester*, 1872.

——— ——— Index catalogue of the Hulme lending branch. 8°. *Manchester*, 1867.

——— Scientific students' association. Report. 3 Nos., 1864–68. 8°. *Manchester*, 1864–68.

Mandelblüh, Clement. Leitfaden zur Untersuchung der verschiedenen Zuckerarten, so wie der in der Zuckerfabrikation vorkommenden Producte. 8°. *Brünn*, 1867.

Mandey, Ven. Mechanick powers; or the mystery of nature and art unvailed. 4°. *London*, 1702.

Mandl, L. Traité pratique du microscope, et de son emploi dans l'étude des corps organisés. Suivi de recherches sur l'organisation des animaux infusoires. Par D. C. G. Ehrenberg. 8°. *Paris*, 1839.

MANGANESE. Die Braunstein- oder Manganerz-Bergbaue in Deutschland, Frankreich und Spanien. *See* **Zerrenner**, Carl.

Mangeot, H. Des armes de guerre rayées. 2e éd. 8°. *Bruxelles*, 1860.

——— Théorie du revolver Mangeot-Comblain. 12°. *Bruxelles*, 1858. pp. 33.

——— Traité du fusil de chasse et des armes de précision. 8°. *Paris*, 1858.

Manget, V. H. Analogy of the languages of southern Europe. 12°. *Philadelphia*, 1855.

Mangin, Arthur. La navigation aérienne. 12°. *Tours*, 1855.

Mangon, Dictionnaire des arts, etc. *See* **Laboulaye**, C. P. L.

Mann, Horace, Life and works of. Ed. by Mrs. Mary Mann. [In 5 v.] Containing lectures and annual reports. v. 2–3. 8°. *Cambridge*, 1867–68.

Mann, James A. The cotton trade of Great Britain, its rise, progress, and present extent. 8°. *London*, 1860.

——— and **Ayscough**, James. A description of the compound, commonly

Digitized by Google

Mann and **Ayscough**—Continued. called the reflecting or double microscope. With great improvements. 8°. *London*, *n. d.* pp. 20.

Mann, William W. On the metrical decimal system. *See* **Vattemare**, Alexander.

MANNERS and customs, ancient, mediæval and modern. The spoon. *See* **Westman**, Habakkuk O.

——— and customs of the Japanese in the 19th century, from the accounts of recent Dutch residents in Japan and from the German work of Fr. von Siebold. 18°. *New York*, 1842.

MANNHEIM. Mannheimer Verein für Naturkunde. Jahresberichte, 25ster, 32ster-40ster. Erstattet von E. Weber. 8°. *Mannheim*, 1859, 1866-74——.

Manningham, Henry. A compleat treatise of mines, extracted from Mémoires d'artillerie. To which is annexed, Professor Belidor's Dissertation on the force and physical effects of gunpowder. 8°. *London*, 1752.

Manny, John H. McCormick vs. Manny and others. Opinion of Mr. Justice McLean. *See* **McLean**, J.

——— McCormick vs. Talcott et al., survivors of. Appeal. *See* **McCormick**, C. H.

MANOMETER, The improved. *See* **Stillman**, P.

Mansfield, J. B. History of New England. *See* **Coolidge**, Austin J.

Mansil, Richard. The age and life of our earth. 8°. *Rock Island, Ill.*, 1867.

Mantell, Gideon Algernon. Petrifactions and their teachings: a handbook to the gallery of organic remains of the British museum. 12°. *London*, 1851.

Manual (The) of science and arts and photographic miscellany. Ed. by J. J. and E. Harrison. Nos. 1-5, April to August, 1854. 8°. *London*, 1854.

——— of the boat exercise at the naval academy: designed for the practical instruction of the senior class in naval tactics. 24°. *New York*, 1868.

——— of the practical naturalist; or directions for collecting, preparing and preserving subjects of natural history, containing instructions and recipes for taking and stuffing quadrupeds, birds, fishes, reptiles; selecting, preserving, and arranging insects, minerals, plants, shells, etc. 16°. *Boston*, 1831.

Manuel de calligraphie. Méthode complète de Carstairs dite américaine. Traduit de l'anglais par M. Trémery. Accompagné d'un atlas. 18°. *Paris*, [1829]. **111 Manuels Roret.**

——— de médecine et de chirurgie domestique. Ed. par J. Morin. 3e éd. 18°. *Paris*, 1833. **2 Manuels Roret.**

——— de médecine vétérinaire. 2e partie. Des animaux domestiques à l'état de maladie. 12°. *Bruxelles*, 1856.

——— du marchand papetier. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 7.**

——— du parfumeur; 2e éd. entièrement renouvelée et très-augmentée par Mme. Celnart. *Illus.* 18°. *Paris*, 1834. **78 Manuels Roret.**

——— du pâtissier; 2e éd. entièrement refondue et ornée de planches. Par M. Leblanc. 18°. *Paris*, 1834. **89 Manuels Roret.**

——— pratique et élémentaire des poids et mésures, des monnaies et du calcul décimal. 5e éd. revue et corrigée. Par M. Tarbé des Sablons. 18°. *Paris*, 1833. **109 Manuels Roret.**

Manufacturer (The) and builder. v. 1-8. 4°. *New York*, 1869-76——.

MANUFACTURES. *See, also*, **Industries.**

——— Advancement of arts, manufactures, and commerce. *See* **Bailey**, A. M.

——— Annales de l'industrie: mémoires sur les arts et métiers, les manufactures, etc. *See* **Le Normand**, L. S., and **Moléon**, J. G. V. de.

——— Arts and manufactures in India. By J. F. Royle. *See* **Lectures** on the results of the exhibition.

——— Cyclopædia of. *See* **Tomlinson**, C.

——— Days at the factories. *See* **Dodd**, G.

——— Dictionary of manufacturing terms. *See* **Simmonds**, P. L.

——— Dictionary of mechanical science. *See* **Jamieson**, A.

——— Dictionary of the arts, sciences and. *See* **Francis**, G. W.

——— Dictionnaire de l'industrie manufacturière, commerciale et agricole. *See* **Baudrimont**, A., and others.

——— Dictionnaire des manufactures, etc. *See* **Laboulaye**, C. L.

——— Economic geology; or geology in its relation to the arts and manufactures. *See* **Page**, David.

——— Economy of machinery and manufactures. *See* **Babbage**, C.

Digitized by Google

MANUFACTURES. Die Fabriksgesetze Englands seit 1833. *See* AUSTRIA. **K. K. Handelsministerium.**

——— Les grandes usines de France au 19e siècle. *See* **Turgan, J.**

——— History of American. *See* **Bishop, J. L.**

——— Illustrations of arts and. *See* **Aikin, A.**

——— Industria manifatturiera in Lombardia. *See* **Merlini, Giovanni.**

——— Machinery and manufactures in Great Britain, exhibited in letters patent. *See* **Weale's papers on engineering, v. 5.**

——— Manuel du manufacturier. *See* **Peuchet. 53 Manuels Roret.**

——— Manufacturers' supplies, A catalogue of. *See* Williams, J. H. and N. A.

——— Manufacturing arts in ancient times; with special reference to Bible history. *See* **Napier, James.**

——— Mechanics' magazine. *See* **Mechanics'.**

——— of the ancients, etc. *See* **Gilroy, Clinton G.**

——— Philadelphia and its manufactures. *See* **Freedley, E. T.**

——— Philosophy of. *See* **Ure, Andrew.**

——— Progress of machinery and manufactures in Great Britain. *See* **Progress.**

——— Recueil manufacturier. *See* **Moléon, J. G. V. de.**

——— Report on. By R. H. Thurston. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 3.**

——— Transactions of the Society for encouragement of. *See* LONDON. **Society for, etc.**

——— Treatise on the manufactures and machinery of Great Britain. *See* **Barlow, P.**

——— Versuch eines Lehrbuchs der Fabrikwissenschaft. *See* **Jung, D. Johann Heinrich.**

MANURE. Abridgments English Patents, No. 3.

——— Düngerlehre. *See* **Bergmann.**

——— Des engrais inorganiques et du sel marin. *See* **Becquerel, Antoine César.**

——— Essay on calcareous. *See* **Ruffin, E.**

——— Fabrication des engrais. *See* **Rohart, E.**

——— Field book of. *See* **Browne, D. J.**

——— Hilfsdüngemittel. Von Ant. Adam Schmied. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

——— Lehre von den mineralischen Düngmitteln. Von K. R. Hermann. *See* **Vermischte Schriften.**

——— A practical treatise on. *See* **Practical treatise.**

——— Traité des amendements et des engrais. *See* **Joigneaux, P.**

——— Traité des engrais et amendements. *See* **Fouquet, M.**

——— Treatise on. *See* **Donaldson, J.**

MAP-DRAWING. *See* **Lubbren, F. M.**

——— ——— *See* **Ripley, E. L.**

——— ——— Elements of. *See* **Cartée, Cornelius S.**

——— ——— The construction of maps. *See* **Jamieson, Alexander.**

——— of the oil region of Pennsylvania, published by Townsend and Dale. 1 sheet. *Meadville, Pa.*, 1865.

Mapes, Charles V. Illustrated catalogue for 1860 and 1861, of plows and other agricultural implements and machines. 8°. *New York*, 1860.

Mapes, James J. The American repertory of arts, sciences, and manufactures. v. 1–4. *New York*, 1840–42.

Marache, M. Manual of chess: containing a description of the board and pieces; chess notation, technical terms, with diagrams illustrating them, etc. 18°. *New York*, 1866.

Marble-worker's (The) manual. Transl. from the French by Mary L. Booth. 16°. *New York*, 1856.

MARBLER, grainer, and sign writer's assistant. *See* **Sutherland, W.**

MARBLING, The art of, as applied to book edges and paper, etc. *See* **Woolnough, C. W.**

——— Fabricant der Buntpapiere. *See* **Exner, W. F. 25 Neuer Schauplatz der Künste.**

MARBURG. Gesellschaft zur Beförderung der Naturwissenschaft. Chemische Constitution organischer Verbindungen. *See* **Kolbe, H.**

——— Gesellschaft zur Beförderung der gesammten Naturwissenschaften. Schriften, Bde. 8–10. 8°. *Marburg*, 1857–71.

Marcel, C. The study of languages, brought back to its true principles, or

Digitized by Google

Marcel, C.—Continued.
the art of thinking in a foreign language. 12°. *New York*, 1869.

Marcet, Jane. Introductions to natural philosophy. *See* LONDON. **Society of useful knowledge, v. 2.**

March, Francis A. A comparative grammar of the Anglo-Saxon language, in which its forms are illustrated by those of Sanskrit, Greek, Latin, Gothic, old Saxon, old Norse, and old high German. 8°. *New York*, 1870.

Marcou, Jules. A geological map of the United States, and the British provinces of North America. With an explanatory text, geological sections, and plates of the fossils which characterize the formations. *Illus.* 8°. *Boston*, 1853.

Marcy, R. B. Thirty years of army life on the border: comprising descriptions of the Indian nomads of the plains, explorations of new territory; a trip across the Rocky Mountains in winter, etc. 12°. *New York*, 1866.

Mareau, Théodore. Industrie linière: rapport à M. Dumas, ministre de l'agriculture et du commerce. T. 1, 2. 8°. *Paris*, 1851.

Marès, Léon. Des nouvelles armes à feu portatives propre à la guerre. 8°. *Montpellier*, 1857. pp. 50.

——— Des nouvelles armes rayées, de leur rôle et de leur influence à la guerre. 8°. *Paris*, 1860.

Mareschal, M. A. A. Iconographie de la faïence. Dictionnaire illustré de planches, reproduisant en couleur la note dominante des principales fabriques, le nom des artistes céramistes et les localités où ils ont travaillé. Dessins inédits. 18°. *Paris*, 1875.

Marestier, Jean Baptiste. Mémoire sur les bateaux à vapeur des États-Unis d'Amérique, avec un appendice sur diverses machines relatives à la marine: précédé du rapport fait à l'Institut sur ce Mémoire par MM. Sané, Biot, Poisson et C. Dupin. Texte, 4°; pl., fol. *Paris*, 1824.

——— Sur les explosions des machines à vapeur, et sur les précautions à prendre pour les prévenir. 8°. *Paris*, 1828. pp. 20.

Marett, P. R. Yachts and yacht building; a treatise on the construction of yachts, and other matters relating to yachting. 8°. *London*, 1856.

Marey, E. J. Animal mechanism: a treatise on terrestrial and aërial locomotion. *Illus.* 12°. *New York*, 1874. **International scientific series, v. 11.**

Marey-Monge, Edm. Die Luftschifffahrtskunde, und ihre Anwendung; nach. *See* **Steinmann,** Ferdinand. **166 Neuer Schauplatz der Künste.**

Margaret (Judd's), Compositions in outline from. *See* **Darley,** Felix O. C.

Marié de l'Isle, E. B. Manuel complet des marchands de bois et de charbons. 2e éd. *Illus.* 18°. *Paris*, 1835. **62 Manuels Roret.**

MARIETTA, Ohio. Marietta library, Catalogue of. 8°. *Marietta*, 1855.

MARINE affairs. Marinewesen. Von Alex. Friedmann. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 17.**

——— aquarium. *See* **Gosse,** Philip Henry.

——— architecture, Treatise on. *See* **Griffiths,** J. M.

——— compound engines, Modern. *See* **Burgh,** N. P.

——— corps, Dictionary of the officers of the, who have served with the land forces. *See* **Gardner,** C. K. Dictionary of the army.

——— ——— Officers of the. *See* UNITED STATES. **Navy** department.

——— dictionary. Dictionnaire de marine à voiles et à vapeur. *See* **Bonnefoux,** Bar. de, and **Paris.**

——— ——— New universal. *See* **Falconer,** W.

——— engines. Handbuch der Schiffe-Dampfmaschinenkunde. *See* **Knorr,** Eduard.

——— engineering. *See, also,* **Engineering.**

——— ——— Modern. *See* **Burgh,** N. P.

——— propulsion. **Abridgment English Patents, No. 5.**

——— ——— Description d'un appareil palmipède, applicable à tous les navires. *See* **Jouffroy,** A. de. Des bateaux à vapeur.

——— roll. *See* **Rogers** and **Black.**

——— telegraphic list. *See* **Rogers,** Henry J.

——— terms. Vocabulary of sea phrases, and terms of art used in seamanship and naval architecture. *See* **Vocabulary.**

MARINER'S physician and surgeon. *See* **Cook,** G. W.

Digitized by Google

Marion, F. The wonders of optics. Transl. from the French by Charles W. Quin. 16°. *New York, n. d.*

MARITIME affairs. *See, also,* **Marine** affairs.

——— ——— Revue maritime et coloniale. *See* **Revue** maritime.

MARKS and monograms on pottery and porcelain of the renaissance and modern periods. *See* **Chaffers,** William.

MARKET assistant, The. *See* **De Voe,** Thomas F.

MARKETS. Des halles et marchés, et du commerce des objets de consommation à Londres et à Paris. *See* **Massy,** J. Robert de.

Marneau, R. Kompendium der Fotografie. 8°. *Wien,* 1860.

Marolois, Samuel. Perspective; augmentée et corrigée par. *See* **Vredeman,** J.

Marquart, John. Six hundred miscellaneous valuable receipts, a thirty years' collection: to which is added two simple gauging tables. 12°. *Lebanon, Pa.,* 1860.

——— United States key for mathematical self instruction on the mechanical sliding rule, commonly called the carpenter's rule. 24°. *Philadelphia,* 1850.

Marquart, John, *jr.,* and **Schreiner,** Henry. Gaging simplified, or every merchant his own gager. 18°. *Philadelphia,* 1849.

Marrow, S. L. National synthesis of the elements of the English language; or phonic manual. 18°. *Indianapolis,* 1868. pp. 44.

Marryat, Frederick. The universal code of signals for the mercantile marine of all nations; with a selection of sentences adapted for convoys, and a system of geometrical signals by G. B. Richardson. Parts 3, 4, 5. 8°. *London,* 1854.

Marryat, Joseph. A history of pottery and porcelain, mediæval and modern. 2d ed. *Illus.* 8°. *London,* 1857.

Marschall, A. Fr. Register der Sitzungsberichte des zoologisch-botanischen Vereines. *See* VIENNA.

Marsh, C. C. La ciencia de teneduria de libros. 8°. *Nueva York,* 1857.

——— A course of practice in single-entry book-keeping, improved by a proof on balance, and applied to partnership business. 8°. *New York,* 1853.

——— The theory and practice of bank book-keeping and joint stock accounts. Exemplified and elucidated in a complete set of bank-account books. Printed in colors. 4°. *New York,* 1856.

Marsh, George P. Man and nature; or physical geography as modified by human action. 8°. *New York,* 1864.

Marshall, James H. The United States manual of biography and history; comprising lives of the presidents and vice presidents of the United States, and the cabinet officers, from the adoption of the constitution to the present day. Also Introductory history of the United States. 8°. *Philadelphia,* 1857.

Marshall, John. Outlines of physiology, human and comparative; with additions by F. G. Smith. 8°. *Philadelphia,* 1868.

——— Universal gazetteer: re-modelled by. *See* **Brooks,** R.

Martel, Charles. Harmony and contrast of colors; transl. by. *See* **Chevreul,** M. E.

Martelle; a game for the field and parlor. 18°. *New York,* 1867. pp. 20.

Martens, J. H. Beschreibung der Hemmungen der höheren Uhrmacherkunst. *Illus.* Text, 8°; atlas, obl. fol. *Furtwangen,* 1858.

Martin, Adolph. Handbuch der Emailphotographie und der Phototypie, oder Anleitung zur Erzeugung von Photographien auf Email und Porzellan, von Photolithographien, Photometallographien, Photozinkographien, Photogalvanographien und Photoxylographien; ferner Anweisungen zur Kohlenbildererzeugung, zum anastatischen Druckverfahren, zur Reproduktion von Handzeichnungen nebst anderweitigen Vorschriften und Rezepten bezüglich der Emailphotographie und der Phototypie. 8°. *Weimar,* 1867.

——— Same. 8°. *Weimar,* 1867. **279 Neuer Schauplatz der Künste.**

——— Handbuch der gesammten Photographie. Vierte mit besonderer Berücksichtigung der Collodiumbilder vermehrte Auflage. *Illus.* 8°. *Wien,* 1854.

——— Méthodes photographiques; procédé sur collodion positif par. *See* **Chevalier,** C.

——— Monckhoven's photographische Optik; translated by. *See* **Monckhoven,** D. van.

Digitized by Google

Martin, Adolph. Neuestes Repertorium der gesammten Photographie. 8°. *Wien*, 1856. **B. 2. Handbuch** der Photographie.

——— Repertorium der Galvanoplastik und Galvanostegie oder der Metallreduction auf nassem Wege in dicken und dünnen Schichten, mit besonderer Berücksichtigung der Galvanographie, Glyphographie, Chemiotypie und der speciellen Anwendung auf das Vergolden, Versilbern, Verbleien, Verzinken, etc. B. 1. Die Galvanoplastik. B. 2. Die Galvanostegie. 8°. *Wien*, 1856.

Martin, Benjamin. An essay on electricity: an enquiry into the nature, cause and properties thereof, on the principles of Sir Isaac Newton's theory of vibrating motion, light and fire; and the various phænomena of forty-two capital experiments; with some observations relative to the uses that may be made of this wonderful power of nature. 8°. *Bath*, 1746. pp. 40.

——— New elements of optics; or the theory of the aberrations, dissipation, and colors of light. 8°. *London*, 1759.

Martin, E. Art de dégraisser et de remettre à neuf les tissus. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 9.**

——— Art de la conservation des substances alimentaires. 18°. *Paris*, 1829. **Encyclopédie populaire, v. 8.**

——— Art de la teinture de la soie, du coton, du lin, et des toiles imprimées. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 12.**

——— Art de préparer la chaux et le plâtre et de fabriquer les briques et les carreaux. 18°. *Paris*, 1829. **Encyclopédie populaire, v. 11.**

——— Art du maçon. 18°. *Paris*, 1829. **Encyclopédie populaire, v. 10.**

——— Chimie du teinturier. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 13.**

Martin, Frederick. The statesman's year book: a statistical, genealogical and historical account of the states and sovereigns of the civilized world. 1864-1876. 13 v. 8°. *London*, 1864-76——.

Martin, George W. Equation tables; designed to furnish merchants, manufacturers, and other business men with an accurate set of calculations for averaging accounts. 4°. *Rochester*, 1853.

Martin, James. British journal photographic almanac; ed. by. *See* **British journal.**

Martin, James. The photographic art. *See* **Sparling,** M.

Martin, Philip Leopold. Dermoplastik und Museologie, oder das Modelliren der Thiere und das Ausstellen und Erhalten von Naturaliensammlungen. 8°. *Weimar*, 1870.

——— Taxidermie, oder die Lehre vom Konserviren, Präpariren und Naturalien-Sammlen auf Reisen, etc. 8°. *Weimar*, 1869.

Martin, Robert Montgomery. China; political, commercial and social; in an official report to her majesty's government. 2 v. 8°. *London*, 1847.

——— Statistics of the colonies of the British empire: with the charters and the engraved seals. From the official records of the colonial office, with an appendix. 8°. *London*, 1839.

Martin, Thomas. The circle of the mechanical arts, containing treatises on the various manual arts, trades and manufactures. *Illus.* 4°. *London*, 1813.

Martin, W. C. L. On the hog. *See* **Youatt,** William.

——— Die Geschichte des Pferdes, sein Ursprung, seine körperliche und psychische Charakteristik, seine Varietäten und Stammverwandten. Nebst einem Anhange, W. Youatt's: Ueber die Krankheiten des Pferdes. Nach dem Englischen bearbeitet von F. M. Duttenhofer. Mit vielen Abbildungen. 16°. *Stuttgart*, 1847. **Wochenbände, 85-90.**

Martine, Arthur. Handbook of etiquette, and guide to true politeness. 12°. *New York*, 1866.

Martius, Carl Friedrich Philipp von. Denkrede auf Alexander von Humboldt. Gelesen in der öffentlichen Sitzung der königlich-bayerischen Akademie der Wissenschaften am 28. März 1860. 4°. *München*, 1860. pp. 40.

——— Erinnerung an Mitglieder der mathematisch-physikalischen Classe der königlich-bayerischen Akademie der Wissenschaften. Eine Rede vorgetragen in der öffentlichen Sitzung zur Feier des akademischen Saecularfestes am 29. März 1859. 4°. *München*, 1859.

——— Zum Gedächtniss an Jean Baptiste Biot. Gesprochen in der öffentlichen Sitzung der königlich-bayerischen Akademie der Wissenschaften am 28. März 1862. 4°. *München*, 1862. pp. 20.

Digitized by Google

Martius-Matzdorff, J. Die interessantesten Erscheinungen der Stereoskopie. 8°. *Berlin*, 1868.

Martyn, John. Philosophical transactions; abridged by. *See* LONDON. **Royal** society.

Marucchi, Antonio. Manuale practico per la misura e stima dei terreni. Tom. 1-3. 8°. *Roma*, 1857-58.

Marvin, J. D. Granulation of gunpowder: its theory and practice. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— Instructions for use and care of Gatling guns. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— Naval experimental battery. *See* UNITED STATES. **Navy department.**

Mary (Virgin). Rosenkrantz Marie. *See* **Rosenkrantz.**

MARYLEBONE free library. *See* LONDON.

Maskell, William. The industrial arts. Historical sketches, with numerous illustrations. 8°. *New York*, 1876. **South Kensington art and science handbooks, No. 8.**

——— Ivories ancient and mediæval. *Illus.* 8°. *New York*, 1876. **South Kensington art and science handbooks, No. 2.**

Mason, B. M. Theo. Organization of landing parties for operations on shore. *See* UNITED STATES. **Navy** dept. Ordnance papers.

Mason, Charles. Articles on the currency. 8°. *Burlington, Iowa*, 1858. pp. 39.

——— Interference between H. W. Farley and assignees of E. G. Allen. Argument on behalf of said assignees before his honor Judge Merrick on appeal from the commissioner of patents. 8°. 1859. pp. 13. [2 copies.]

Mason, George Henry. The costume of China. Illustrated by sixty engravings, with explanations in English and French. fol. *London*, 1800.

Mason, Monck. Aeronautica, or sketches illustrative of the theory and practice of aerostation, comprising an enlarged account of the late aerial expedition to Germany. 8°. *London*. 1838.

Mason, Richard. Farrier and stud-book, etc. Essay on mules, with supplement by J. S. Skinner. 8°. *Philadelphia*, 1866.

MASONIC biography and dictionary. *See* **Row, Augustus.**

MASONIC chart, The true. *See* **Cross** Jeremy L.

MASONRY. Art de la maçonnerie. Par Lucotte. PARIS. **Acad. roy. des sc.; arts et métiers, v. 14.**

——— Art du maçon. *See* **Martin, E. Encyclopédie populaire, v. 10.**

——— Handbuch für Maurer und Steinhauer. *See* **Matthaey, C. 22, 23 Neuer Schauplatz der Künste.**

——— Lehre vom Steinschnitt. Architektonische Glieder für Gurten, Gesimse, etc. *See* **Rössler,** Hector.

——— Manuel du maçon-plâtrier, du carreleur, du couvreur et du paveur. *See* **Toussaint. 83 Manuels Roret.**

——— Muster-Sammlung für Maurer. *See* **Dempp, C. W.**

——— Muster-Sammlung für Maurer. *See* **Hoffmann, P.**

——— Treatise on. *See* **Dobson, E. Weale's series, Nos. 25, 26.**

Masquelez. Notions élémentaires sur la fabrication et l'emploi des armes et des munitions de l'infanterie. 2e éd. *Illus.* 8°. *Paris*, 1861.

MASSACHUSETTS. Abstract of the census of 1855. *See* **De Witt, F.**

——— Homœopathic medical society. Publications. v. 2, 1861-67. roy. 8°. *Cambridge*, 1867.

——— Registry and returns of births, marriages and deaths. 1855. *See* **De Witt, F.**

——— Report of the commissioners of fisheries, for the year ending Jan. 1, 1868. 8°. *Boston*, 1868.

——— Report of the commissioners of Massachusetts on the exposition at Vienna in 1873. 8°. *Boston*, 1874.

Massey, W. The origin and progress of letters. An essay in two parts. 8°. *London*, 1763.

Massie, J. Cam. A treatise on the eclectic southern practice of medicine. roy. 8°. *Philadelphia*, 1854.

Massoul, Constant de. A treatise on the art of painting, and the composition of colors. 8°. *London*, 1797.

MASTICS. Treatise on limes, cements, mortars, concretes, mastics, plastering, etc. *See* **Burnell, G. R. Weale's series, No. 45.**

MASTING. Art de la mâture. Par C. Romme. *See* PARIS. **Acad. des sc.; arts et métiers, v. 45.**

——— Art of making masts, etc. *See* **Art.**

Digitized by Google

MASTING. Mast making and rigging of ships, Treatise on. *See* **Kipping**, R. **Weale's series, No. 54.**

—— Treatise on masting ships and mast making. *See* **Fincham**, J.

MASTS, Method of restoring. *See* **Pakenham**, Edward.

—— sails, rigging, etc. **Abridgments English Patents, No. 73.**

MATCHES, Fabrication of. *See* **Dussauce**, H.

—— Die Feuerzeugfabrikation. *See* **Wagner**, Heinrich. **289 Neuer Schauplatz der Künste.**

Matchet, J. J. Le confiseur moderne, ou l'art du confiseur et du distillateur. 8°. *À Paris*, An XI. [1803].

MATERIA Indica; or articles employed by the Hindoos and other eastern nations in their medicine, arts, and agriculture. *See* **Ainslie**, Whitelaw.

—— medica. *See* **Biddle**, John B.

—— —— *See* **Journal** of materia medica.

—— —— Dispensatory of the United States. *See* **Wood**, George B., and **Bache**, Franklin.

—— —— or pharmacology and therapeutics. *See* **Tully**, William.

—— —— and pharmacy, Lectures on. *See* **Carson**, Joseph.

—— —— and therapeutics. *See* **Ballard**, Edward, and **Garrod**, A. B.

—— —— and therapeutics. *See* **Mitchell**, Thomas D.

—— —— and therapeutics. *See* **Paine**, Martyn.

—— —— and therapeutics, Lectures on. *See* **Beck**, John B.

—— —— Characteristic. *See* **Burt**, W. H.

—— —— Comparative. *See* **Gross**, H.

—— —— A compend of. *See* **Riley**, John C.

—— —— Elements of. *See* **Kost**, John.

—— —— Elements of. *See* **Pereira**, J.

MATERIALS, Properties of. *See* **Tredgold**, T.

—— Strength of. *See* **Barlow**, P.

—— Strength of. *See* **Johnson**, W. R.

—— Strength of. *See* **Warr**, G. F.

—— Strength of. *See* **Whildin**, J. K.

—— Strength of. By G. Rennie. *See* **Haskoll**, W. D. Asst. eng. railway guide.

MATHEMATICAL essays. *See* **Donn**, Benjamin.

—— instruments. **Abridgments English Patents, No. 76.**

MATHEMATICAL instruments. *See* **Barrow**, J.

—— —— *See* **Simms**, Frederick W.

—— —— Catalogue of. *See* Casella, L. P.

—— —— Catalogue of. *See* Pike, Benjamin.

—— —— Construction and uses of. *See* **Bion**, N.

—— —— Mathematische und physikalische Instrumente. Von Ferdinand Lippich. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe. 14.**

—— —— Méthode pour diviser les instruments de mathématique. Par M. F. d'A. d'A. de Chaulnes. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 42 and 18.**

—— —— Treatise on. *See* **Heather**, J. F. **Weale's series, No. 32.**

—— —— Treatise on. *See* **Simms**, F. W.

—— —— The use of. *See* **Sleeman**, Thomas.

—— —— The works of Edmund Gunter, containing the description and use of his instruments. *See* **Gunter**, Edmund.

—— (The) monthly. Ed. by J. D. Runkle. v. 1–3. 4°. *Cambridge*, 1859–61.

MATHEMATICIANS. Veterum mathematicorum opera. *See* **Veterum.**

MATHEMATICS. Analytical view of Newton's Principia. *See* **Brougham** *Lord*, and **Routh**, E. J.

—— Beobachtungen durch die Methode der kleinsten Quadratsummen. *See* **Hülsse**, J. A.

—— Bibliotheca mathematica. *See* **Erlecke**, A.

—— Bildungsgesetze eines Kettenbruches. *See* **Seidel**, L.

—— A compendious course of. *See* **Hoste**, P.

—— Comprehensive. *See* **Winslow**, E. S.

—— Cursus mathematicus. *See* **Leybourn**, William.

—— for practical men. *See* **Gregory**, Olinthus.

—— Handbuch der Bergmaschinenmechanik. *See* **Weisbach**, Julius.

—— Histoire des sciences mathématiques chez les Grecs et les Orientaux. *See* **Sedillot**, L. P. E. A.

—— The logic and utility of. *See* **Davies**, Charles.

—— Mathematical and philosophical works. *See* **Wilkins**, John.

Digitized by Google

MATHEMATICS. Mathematical dictionary. *See* **Davies,** Charles, and **Peck,** W.G.

——— Mathematical operations. *See* **Robinson,** H. N.

——— Mathematical principles applied to the theories of physical forces. *See* **Challis,** James.

——— Mathematical recreations. *See* **Robinson,** H. N.

——— Mathematical sciences. *See* **Young,** J. R., and others. **Orr's circle of the sciences, v. 8.**

——— Mathematical tables. *See* **Christison,** John.

——— Mathematische Lehrmittel in Volks- und Mittelschulen. Von Josef Knirr. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— Mechanic's calculator. *See* **Grier,** W.

——— Method of least squares. *See* **Chauvenet,** W. Manual of astronomy.

——— Outlines of mathematical science. *See* **Davies,** Charles.

——— Philosophiae naturalis principia mathematica. *See* **Newton,** Isaac.

——— Philosophical and mathematical dictionary. *See* **Hutton,** Charles.

——— The philosophy of. *See* **Bledsoe,** Albert Taylor.

——— The philosophy of. *See* **Comte,** Auguste.

——— practically applied to the useful and fine arts. *See* **Dupin,** Charles.

——— Principes des sciences mathématiques. *See* **Fortia D'Urban,** — de.

——— Programa de matemáticas, en los institutos de segunda enseñanza. *See* **Programa.**

——— Rara mathematica. *See* **Halliwell,** James Orchard.

——— Récréations mathématiques. *See* **Récréations.**

——— simplified. *See* **Fisher,** Thomas.

——— Tracts, mathematical and physical. *See* **Brougham,** *Lord.*

——— Uses of the lines of numbers, etc. *See* **Description,** nature, etc.

——— The works of Edmund Gunter. *See* **Gunter,** Edmund.

Mathews, A. J., & co. Hints on various subjects connected with our business. 12°. *Buffalo,* 1856.

Mathieu, J. Instructions à l'usage des inventeurs. *See* **Armengaud,** C.

Mathieu de Dombasle, Christophe Joseph Alexandre. Description des instrumens d'agriculture; traduit par. *See* **Thaer,** A.

——— Œuvres diverses, économie politique, instruction publique, haras et remontes. 8°. *Paris,* 1843.

Matile, George A. National political economy; transl. from the German of Frederick List, by. *See* **List,** Frederick.

MATTER and force, Thoughts on. *See* **Ewbank,** Thomas.

——— The phases of. *See* **Kemp,** T. Lindley.

Matteucci, C. Leçons sur les phénomènes physiques des corps vivants. *Illus.* 12°. *Paris,* 1847.

Matthaey, Carl Ludwig. Die Kunst des Bildhauers in allen ihren Zweigen. *Illus.* 8°. *Ilmenau,* 1830. **52 Neuer Schauplatz der Künste.**

——— Der Ofenbaumeister und Feuermechanist oder die Kunst, die Wirkung des Feuers zu vermehren. Mit vielen Beispielen. 3te Aufl. von C. Hartmann. *Illus.* 8° *Weimar,* 1847. **51 Neuer Schauplatz der Künste.**

——— Praktisches Handbuch für Maurer und Steinhauer. 3te Aufl. von J. C. G. Hampel. *Illus.* 16°. *Weimar,* 1843. **22, 23 Neuer Schauplatz der Künste.**

——— Der Stein- oder Dammsetzer. Nebst einer Anleitung zur Gründung der Städte, hinsichtlich der Anlegung ihrer Strassen, ihrer öffentlichen Spaziergänge und ihrer Fahr- und Fusswege in den nächsten Umgebungen. *Illus.* 8°. *Ilmenau,* 1827. **26 Neuer Schauplatz der Künste.**

——— Theoretisch-praktisches Handbuch für Zimmerleute. Theil 1-3. 2te Aufl. Von J. C. G. Hempel. *Illus.* 16°. *Weimar,* 1840-45. **47, 49 Neuer Schauplatz der Künste.**

——— Der volkommene Dachdecker. Nach den besten Schriften und aus eigener vieljähriger Erfahrung bearbeitet von. *Illus.* 16°. *Ilmenau,* 1833. **61 Neuer Schauplatz der Künste.**

——— Der wohlunterrichtete Ziegler. *See* **Schaller,** P. **34 Neuer Schauplatz der Künste.**

Matthews, Washington. Ethnography and philology of the Hidatsa Indians. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. Misc. pubs., No. 7.**

Digitized by Google

Matthias, J. F. Der landwirthschaftliche Maschinenbauer; hrsg. v. *See* **Landwirthschaftliche.**

Mattingly. Navy of the United States. Speech in the case of Mattingly vs. Washington and Alexandria steamboat co. *See* **Dickerson,** E. N.

Mattson, Morris. The American vegetable practice, or a new and improved guide to health. 8°. *Boston,* 1841.

—— Manual of directions for the employment of injections in various diseases. With remarks upon the nature and treatment of habitual constipation. 24°. *Boston,* 1852.

Maty, Paul Henry. Index to the philosophical transactions, v. 1-70. *See* LONDON. **Royal** society.

Maudsley, Henry. The physiology and patho ogy of the mind. 8°. *New York,* 1867.

Maugin, J. C. Manuel du luthier. *Illus.* 18° *Paris,* 1834. **51 Manuels Roret.**

Maule, —. The home book. *See* **Valentine,** R.

Maupertuis, Pierre Louis Moreau de. Vie de Maupertuis; ouvrage posthume, etc. *See* **La Beaumelle,** L'Angliviel de.

Mäurer, Edua d. Die Formen der Walzkunst; und das Façoneisen, seine Geschichte, Benutzung und Fabrikation für die Praxis der gesammten Eisenbra che. Mit Atlas. 8°. *Stuttgart,* 1865.

Maurice, R. Ph. F. De l'électricité médicale. 24°. *Paris,* 1810.

Maury, Alfred. Indigenous races of the earth: contributions by. *See* **Nott,** J. C., and **Gliddon,** George R.

Maury, L. F. Alfred. Rapport fait le 16 décembre 1859, à la seconde assemblée générale annuelle de la Société de géographie, sur ses travaux et sur les progrès des sciences géographiques, pendant l'année 1859. 8°. *Paris,* 1860.

Maury, Matthew Fontaine. Explanations and sailing directions to accompany the wind and current charts. 6th ed. 4°. *Philadelphia,* 1854.

—— The physical geography of the sea. 8°. *New York,* 1855.

Mavor, William. Universal stenography; or a new compleat system of short writing. 4th ed. 8°. *London,* 1800.

Mawe, John. A treatise on diamonds and precious stones: including their history, natural and commercial. To which are added the best methods of cutting and polishing them. 2d ed. 8°. *London,* 1815.

—— The voyager's companion, or shell collector's pilot; with instructions where to find the finest shells, also for preserving the skins of animals, etc. 3d ed. 24°. *London,* 1821.

Maximilian II. König Maximilian II. und die Wissenschaft. *See* **Döllinger,** Ignatz von.

MAXIMS, morals and miscellanies. *See* **Hunt,** Freeman.

Maxson, Edwin R. Hospitals, British, French, and American. 12°. *Philadelphia,* 1868.

Maxwell, James Clerk. A treatise on electricity and magnetism. 2 v. 8°. *Oxford,* 1873. **Clarendon press series.**

Maxwell's new and improved steamboat wages calculator. 12°. *Louisville, Ky.,* 1855.

May-queen (Tennyson's), Illustrations from. *See* **Tiffany,** W. S.

MAYENCE. Bericht über die Industrie-Ausstellung zu Mainz 1842. *See* **Rössler,** Hektor.

Mayer, Adolf. Lehrbuch der Agrikulturchemie, in vierzig Vorlesungen. 8°. *Heidelberg,* 1871.

—— Lehrbuch der Gährungschemie, als Einleitung in die Technologie der Gährungsgewerbe, im Anschluss an sein Lehrbuch der Agrikulturchemie. *Illus.* 8°. *Heidelberg,* 1874.

Mayer, Alfred M. Lecture-notes on physics. 8°. *Philadelphia,* 1868.

Mayer, Brantz. Mexican history and archæology. **Smiths'n contrib., v. 9.**

Mayer, Carl, and **Popović,** Alex. Heeres-Ausrüstung. Heeres-Verpflegung. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

Mayer, Julius Robert. Correlation and conservation of forces. By Prof. Grove and others. *See* **Grove,** William Robert.

Mayhew, Edward. The illustrated horse doctor; an account of the various diseases to which the equine race are subjected, together with the latest mode of treatment, and all the requisite prescriptions. *Illus.* 8°. *Philadelphia,* 1865. [!]

—— The illustrated horse management: containing remarks upon anatomy, medi-

Digitized by Google

Mayhew, Edward—Continued.
cine, shoeing, teeth, food, vices, stables; likewise a plain account of the situation, nature, and value of the various points, with comments on grooms, dealers, breeders, breakers, and trainers, also on carriages and harness. *Illus.* 8°. *Philadelphia,* 1864.

Mayhew, Henry. London labour and London poor: the condition and earnings of those that will work, cannot work, and will not work. 3 v. 8°. *London,* [1864 ?]

Mayhew, Ira. University book-keeping, a treatise on business and accounts. 8°. *Boston,* 1868.

Maynard, Edward. American journal of dental science; ed. by. *See* **American.**

Maynard, Edward. Argument in the appeal from the decision of Hon. P. F. Thomas, commissioner of patents, refusing a patent for his fire-arm. *See* **Robbins,** Z. C.

Mayne, Jean Henri. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. L.

Mayne, Robert Gray. An expository lexicon of the terms, ancient and modern, in medical and general science; including a complete medico-legal vocabulary, and presenting the correct pronunciation, derivation, definition, and application of the names, analogues, synonymes, and phrases, in English, Latin, Greek, French and German, connected with medicine and employed in the natural sciences. 8°. *London,* 1860.

Mead, Peter B. An elementary treatise on American grape-culture and wine making. *Illus.* 8°. *New York,* 1867.

—— Horticulturist; ed. by. *See* **Horticulturist.**

Meade, Richard W. A treatise on naval architecture and ship-building. 8°. *Philadelphia,* 1869.

Meadows, F. C. A new French and English pronouncing dictionary. 12°. *New York,* 1855.

MEASURE of the earth. Proposition d'une mesure de la terre. *See* **Anville,** M. d'.

MEASURER, The complete. *See* **Hawney,** William.

MEASURES. *See, also,* **Weights** and measures.

MEASURES. Definition of the moneys, weights and measures of all countries. *See* **Simmonds,** P. L. Dictionary of trade products.

—— Metrical decimal system, etc. *See* **Vattemare,** Alexander.

—— Le système métrique appliqué aux anciennes mesures du département de la Moselle. *See* **Daulnoy,** F.

—— Universal dictionary of weights and. *See* **Alexander,** J. H.

—— The universal metric system. *See* **Colin,** Alfred.

—— Weights and measures according to the decimal system. *See* **Craig,** Benjamin Faneuil.

—— weights, and moneys of all nations. *See* **Woolhouse,** W. S. B. **Weale's series, No. 101*.**

MEAT-CURING. Das Fleischergeschäft. *See* **Weintz,** M. **149 Neuer Schauplatz der Künste.**

MEAUX. Du drainage: rapport publié par la Société d'agriculture, sciences et arts de Meaux. *See* **Jourdier,** Auguste.

MECHANIC and builder's price book. *See* **Wilson,** J.

—— and engineer's magazine. *See* **Practical** mechanic.

—— and student's guide, The. *See* **Joynson,** Francis Herbert.

—— The English. *See* **English** mechanic.

—— The farmer and mechanic. *See* **Farmer.**

—— Handbook for the. *See* **Byrne,** O.

—— The operative. *See* **Nicholson,** J.

—— (The), or compendium of practical inventions. *See* **Smith,** James.

MECHANICAL arts, Circle of the. *See* **Martin,** T.

—— —— Hand book of. *See* **Burn,** R. S.

—— —— Lectures on natural philosophy and the. *See* **Young,** Thomas

—— calculator. *See* **Walters,** W. W.

—— engineering, Treatise on. *See* **Campin,** F.

—— engineers. *See* BIRMINGHAM. **Institution of mechanical engineers.**

—— Euclid. *See* **Whewell,** William.

—— inventor's guide. *See* **Wylson,** J.

—— movements, 507. *See* **Brown,** Henry T.

—— philosophy. *See* **Coues,** Samuel Elliott.

Digitized by Google

MECHANICAL philosophy. *See* **Mitchell, Walter, Young, J. R., and Imray, J. Orr's circle of the sciences, v. 9.**

—— —— horology and astronomy. *See* **Carpenter, W. B.**

—— —— System of. *See* **Robinson, J.**

—— powers. Essai sur les combinaisons méchaniques. Par J. Botterman. PARIS. **Acad. roy. des sc.; arts et métiers, v. 12 and 19.**

—— text book. *See* **Rankine, W. J. M., and Bamber, E. F.**

MECHANICIAN and constructor for engineers. *See* **Knight, Cameron.**

MECHANICS' and agricultural fair association of Louisiana. Charter and by-laws. *See* NEW ORLEANS.

—— Biographical sketches of distinguished. *See* **Connell, J.**

—— calculator. *See* **Grier, W.**

—— companion. *See* **Nicholson, P.**

—— companion, Engineers and. *See* **Hogg, J.**

—— Encyclopædia. *See* **Hebert, L.**

—— friend. *See* **Axon, William E. A.**

—— guide. *See* **Shelton, William V.**

—— journal, Architects' and. *See* **Architects'.**

—— —— The practical. *See* **Practical mechanic's journal.**

—— magazine, American. *See* **American.**

—— (The) magazine, and journal of science, arts and manufactures. v. 1–97, 1823-24—1872. Old series, v. 1–69, 1823—1858. New series, v. 1–28, 1859—1872. [v. 1–10, old series, entitled "Mechanics' magazine"; v. 11–57, "The mechanic's magazine, museum, register, journal, and gazette"; v. 58–69, "The mechanics' magazine"; v. 1–28, new series (v. 70–97), "The mechanic's magazine and journal of engineering, agricultural machinery, manufactures, and ship building"; merged into "Iron" in 1873. v. 40–56 ed. by J. C. Robertson; v. 57–66, by R. A. Brooman; v. 67–73 (v. 4, new series), by R. A. Brooman and E. J. Reid; v. 92–93, by H. Gardner. v. 1 is a reprint. v. 39 missing.] 8°, 4°, and fol. *London*, 1824–72.

—— Same. Manuscript index of v. 1–69 in 17 large 4° vols.

—— magazine, Appletons'. *See* **Appletons'.**

—— Memoirs of eminent. *See* **Howe, H.**

Mechanics' (The) mirror. v. 1. 8°. *Albany*, 1846.

—— pocket-book, Engineers and. *See* **Haswell, C. H.**

—— pocket dictionary. *See* **Grier, W.**

—— receipts, for the use of founders, turners, etc. *See* **Whittaker, Joseph.**

—— register, The London. *See* **London mechanics' register.**

—— —— The new London. *See* **New.**

MECHANICS and engineering, A pocket book of. *See* **Nystrom, John W.**

—— and mechanism. *See* **Burn, R. S.**

—— Apparatus for use in mechanical philosophy. *See* **Willis, R.**

—— Applications of the science of. *See* **Renwick, J.**

—— Atlas für mechanische Technologie. *See* **Kronauer, J. H.**

—— Bibliotheca mechanico-technologica. *See* **Engelmann, W.**

—— Die chirurgische Mechanik in ihrer Anwendung auf Bandagen, orthopädische Maschinen, etc. *See* **Goldschmidt, S.**

—— Cours de mécanique, théorique et appliquée, etc. *See* **Fustegueras, M., and Hergot, M.**

—— Des deutschen Knaben Handwerksbuch. *See* **Barth, E., and Niederly, W.**

—— Dictionary of machines, mechanics, engine-work and engineering. *See* **Appletons'.**

—— Dictionary of mechanical science, etc. *See* **Jamieson, A.**

—— Discursus et demonstrationes mathematicae. *See* **Galilaeus, Galilaei.**

—— Elementary treatise on. *See* **Smith, Augustus, W.**

—— Éléments de méchanique. *See* **Furiet, M.**

—— Elements of. *See* **Young, J. R.**

—— Elements of analytical. *See* **Bartlett, W. H. C.**

—— Elements of natural philosophy. Section I. *See* **Bartlett, W. H. C.**

—— Elements of the theory of. *See* **Venturoli, Giuseppe.**

—— for practical men. *See* **Jamieson, A.**

—— Four essays on practical. *See* **Fenwick, T.**

—— Fundamental ideas of. *See* **Morin, A. J.**

—— Handbuch der Bergmaschinenmechanik. *See* **Weisbach, Julius.**

Digitized by Google

MECHANICS. Handbuch der Mechanik. *See* **Gerstner**, F. J. von.

——— hydrostatics and pneumatics. *See* **Deschanel**, A. Privat.

——— Jahresbericht über die mechanische Technik und Technologie. *See* **Grothe**, H.

——— Lessons in elementary. *See* **Magnus**, Philip.

——— Manual of applied. *See* **Rankine**, W. J. M.

——— Manuel de mécanique. *See* **Terquem. 31 Manuels Roret.**

——— Mechanical inventor's guide. *See* **Wylson**, J.

——— Mechanick exercises. *See* **Moxon**, J.

——— Mechanick powers. *See* **Mandey**, V.

——— Der mechanische Theil der Naturlehre. *See* **Oersted**, H. C.

——— Observations on the mechanic arts. *See* **Ewbank**, T. Hydraulics.

——— of engineering. *See* **Weisbach**, Julius. **Library of illustrated standard scientific works, v. 2 and 5.**

——— of engineering. *See* **Whewell**, W.

——— or the doctrine of motion. *See* **Emerson**, W.

——— Papers on mechanical subjects. *See* **Whitworth**, J.

——— Philosophy of the mechanics of nature. *See* **Allen**, Z.

——— physical astronomy and speculative mathematics. *See* **Simpson**, Thomas.

——— Power of wind and water to turn mills, and other machines. *See* **Smeaton**, J.

——— Practical model calculator, for the engineer, mechanic, etc. *See* **Byrne**, Oliver.

——— Principles of. *See* **Miller**, W. J.

——— Principles of mechanical philosophy. *See* **Tate**, T.

——— Prinzipien der Mechanik und des Maschinenbaues. *See* **Redtenbacher**, F.

——— Recueil d'ouvrages curieux de mathématique et de mécanique. *See* **Grollier de Servière**, G.

——— Rezeptbuch für Ebenisten, u. s. w. *See* **Siddons**, G. A. **82 Neuer Schauplatz der Künste.**

——— The self-aid cyclopædia, comprising mechanics, etc. *See* **Burn**, R. S.

——— Sull' applicazione de' principj della meccanica analitica del Lagrange ai principali problemi. *See* **Piola**, Gabrio.

MECHANICS, A system of analytic. *See* **Peirce**, Benjamin.

——— Theatrum machinarum. *See* **Leopold**, J.

——— Theory and practice of. *See* **Clark**, S.

——— Traité de mécanique. *See* **La Hire**, M. de

——— Traité de mécanique appliquée aux arts. *See* **Borgnis**, J. A.

——— Traité de mécanique industrielle. *See* **Christian.**

——— A treatise of. *See* **Gregory**, O.

——— A treatise on. *See* **Kater**, H., and **Lardner**, D. **Lardner's cabinet cyclopædia, v. 102.**

——— Treatise on. *See* **Poisson**, S. D.

——— Treatises on. By D. Lardner. *See* LONDON. **Society of useful knowledge, v. 1.**

MECHANISM, Elements of. *See* **Baker**, Thomas. **Weale's series, Nos. 98 and 98*.**

——— Principles of. *See* **Willis**, R.

MECKLENBURG. Grossherzoglich statistisches Bureau zu Schwerin. Beiträge zur Statistik Mecklenburgs. B. 1–8. 8° and 4°. *Schwerin*, 1858–76——.

——— Mecklenburgisch patriotischer Verein. Landwirthschaftliche Annalen. Von Dr. Phil. E. John. Neuester F. Jhrg. 5–7. 4°. *Rostock*, 1866–68.

MEDEA, Memoir of steamship. By T. Baldock. *See* **Tredgold**, T. **Steam engine, 1st series.**

MEDIÆVAL art. The mediæval court in the Crystal palace. *See* **Wyatt**, M. D., and **Waring**, J. B. **Crystal palace library, v. 2.**

Medical and pharmaceutical associations of the District of Columbia. Non-officinal formulæ in local use, compiled and published by the joint committee of the medical and pharmaceutical associations of the District of Columbia. 12°. *Washington*, 1867. pp. 32.

——— and surgical journal, The Boston. *See* **Smith**, J. V. C.

——— association, History of the American. *See* **Davis**, N. S.

——— batteries. *See* **Garratt**, Alfred C.

——— botany. An inaugural botanico-medical dissertation on the 'Phytolacca decandra' of Linnæus. *See* **Schultz**, Benjamin.

——— ——— Phytographie médicale. *See* **Roques**, Joseph.

Digitized by Google

Medical companion, The. *See* **Ewell**, James.
—— companion. *See* **Vaiden**, Thomas Jefferson.
—— department of the university of Pennsylvania, History of. *See* **Carson**, Joseph.
—— diagnosis. *See* **Da Costa**, J. M.
—— dictionary, A new. *See* **Gardner**, D. Pereira.
—— electricity. De l'électricité médicale. *See* **Maurice**, R. Ph. F.
—— —— The practice of. *See* **Powell**, G. D.
—— examinations for life insurance. *See* **Allen**, J. Adams.
—— examinations, Manual of. *See* **Ludlow**, J. L.
—— experience of thirty years' practice. *See* **Price**, John L.
—— flora, or manual of the medical botany of the United States of North America. *See* **Rafinesque**, C. S.
—— guide in treating diseases of horses, mules and neat cattle. *See* **Mohr**, John H.
—— jurisprudence. *See* **Dean**, Amos.
—— —— *See* **Guy**, William A.
—— —— A manual of. *See* **Taylor**, Alfred Swaine.
—— —— The psychological and medico-legal journal. *See* **Psychological.**
—— —— The quarterly journal of psychological medicine and medical jurisprudence. *See* **Quarterly** journal.
—— lexicon. *See* **Dunglison**, Robley.
—— logic. *See* **Oesterlen**, F.
—— profession, in ancient times, The. *See* **Watson**, John.
—— recollections of the army of the Potomac. *See* **Letterman**, Jonathan.
—— science. An analytical compendium of. *See* **Neill**, John, and **Smith**, F. G.
—— —— A conspectus of. *See* **Hartshorne**, Henry.
—— sciences, The American journal of. *See* **American.**
—— student's vade mecum. *See* **Mendenhall**, George.
—— terminology, A dictionary of. *See* **Harris**, C. A.

MEDICINE. Abridgments English Patents, No. 25.
—— and surgery. *See* **British** and foreign medico-chirurgical review.
—— and surgery. *See* **Byford**, Wm. H.
—— Arzneiwaaren von K. D. v. Schroff. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

MEDICINE. Bericht der Oberhessischen Gesellschaft für Natur- und Heilkunde. *See* GIESSEN.
—— Bibliotheca medico-chirurgica et anatomico-physiologica. *See* **Engelmann**, W.
—— A brief exposition of. *See* **Bigelow**, Jacob.
—— British and foreign medico-chirurgical review. *See* **British.**
—— chest companion, The family and ship. *See* **Family.**
—— Cours d'accouchemens et de maladies des femmes, etc. *See* **Hatin**, Jules.
—— Description of the models of hospital cars exhibited at Philadelphia, 1876. *See* UNITED STATES. **War department.**
—— Dictionary of medical science. *See* **Dunglison**, R.
—— Dictionary of medical terminology. *See* **Harris**, C. A.
—— Eclectic practice of. *See* **Paine**, William.
—— The eclectic practice of. *See* **Scudder**, John M.
—— eclectic, Southern practice of. *See* **Massie**, J. Cam.
—— Elektrotherapie. *See* **Benedikt**, Moriz.
—— Elements of. *See* **Dickson**, Samuel Henry.
—— Elements of general pathology. *See* **Stillé**, Alfred.
—— Family physician. *See* **Our** family physician.
—— Hints on the profession of. *See* **Wood**, William Maxwell.
—— Hitt's electro-dynamics, illustrative of the diagnosis and treatment of all diseases. *See* **Hitt**, J. D.
—— The institutes of. *See* **Paine**, Martyn.
—— Instruments and apparatus of, Report on. By T. W. Evans. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**
—— The jurisprudence of. *See* **Ordronaux**, John.
—— Lexicon of terms in medical science. *See* **Mayne**, R. G.
—— Manuel de médecine et de chirurgie domestique. *See* **Manuel**, etc. **2 Manuels Roret.**
—— The medical formulary, etc. *See* **Ellis**, Benjamin.
—— Medical formulary, The American. *See* **Reese**, John J.

Digitized by Google

MEDICINE. Medical staff of the United States Army, and its scientific work. *See* UNITED STATES. **War** department.

——— Medical statistics. By A. Bryson. *See* **Herschel**, J. F. W. **Manual** of scientific enquiry.

——— Medical vade mecum. *See* **Coxe**, Edward Jenner.

——— Medicina practica. *See* **Salmon**, William.

——— Medicinische Jahrbücher. *See* NASSAU.

——— The microscope and its application to clinical medicine. *See* **Beale**, L. S.

——— Oriatrike, or physick refined. *See* **Van Helmont**, John Baptista.

——— Pentaglot dictionary of the terms employed in anatomy, etc. *See* **Palmer**, S.

——— The poor man's friend. *See* **Richter**, W. E.

——— A popular cyclopedia of modern domestic. *See* **Imray**, Keith.

——— The practice of. *See* **Barlow**, George Hilaro.

——— Practice of. *See* **Hartshorne**, Henry.

——— The practice of. *See* **Kost**, J.

——— Practice of. *See* **Wood**, George B.

——— Principles of. *See* **Williams**, Charles J. B.

——— Principles and practice of. *See* **Flint**, Austin.

——— The principles and practice of. *See* **Hood**, John W.

——— The psychological and medico-legal journal. *See* **Psychological.**

——— Quarterly journal of psychological medicine, and medical jurisprudence. *See* **Quarterly** journal.

——— Reform medical practice. *See* **Reform.**

——— Report on. By A. Ruppaner. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 2.**

——— Selected specimens from the medical section, Army medical museum, exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

——— Typho-malarial fever. By J. J. Woodward. *See* UNITED STATES. **War** department.

——— United States army medical transport cart, exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

——— wagon, Perot and co.'s improved, exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

MEDICINES, Concentrated organic. *See* **Coe**, Grover.

——— Hand-book of compound. *See* **Cooley**, Arnold J.

——— their uses and mode of administration. *See* **Neligan**, J. Moore.

MEDITERRANEAN sea. View of the commerce of the United States and the Mediterranean sea-ports. *See* **Baker**, J. M.

Medlock, Henry. Treasury of science, natural and physical; transl. and ed. by. *See* **Schoedler**, F.

MEDWAY, Improvement of the. By S. Bentham. **Weale's papers on engineering, v. 6.**

Mee, —. The home book. *See* **Valentine**, R.

Meech, Levi W. Intensity of the heat and light of the sun. **Smiths'n contrib., v. 9.**

Meeden, C. F. Handbuch der Kaufmanns- und Schiffersprache. Deutsch, Englisch und Französisch. 2te Aufl. 4°. *Hamburg*, 1847.

Meehan, Charles H. W. Catalogue of the law department of the library of congress. *See* UNITED STATES. **Library of congress.**

Meehan, Thomas. The American hand book of ornamental trees. 24°. *Philadelphia*, 1853.

Meek, F. B. Invertebrate cretaceous and tertiary fossils of the upper Missouri country. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. v. 9.**

Méguin, A. B. Art de la réglure des registres et des papiers de musique, suivi de l'art de relier les registres. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 14.**

Meguscher, Francesco. Memoria del Signor Francesco Meguscher in risposta al quesito: additare la migliore e piu facile maniera per rimettere i boschi nelle montagne diboschite dell'alta Lombardia. 8°. *Milano*, 1847.

Meigs, Charles D. The nature, signs and treatment of childbed fevers. 8°. *Philadelphia*, 1854.

——— Obstetrics. The science and the art. 8°. *Philadelphia*, 1849.

——— A treatise on acute and chronic diseases of the neck of the uterus. 8°. *Philadelphia*, 1854.

——— Woman, her diseases and remedies. 2d ed. 8°. *Philadelphia*, 1851.

Digitized by Google

Meigs, J. Aitken. Indigenous races of the earth; contributions by. *See* **Nott,** J. C., and **Gliddon,** George R.

Meigs, J. Forsyth. A practical treatise on the diseases of children. 3d ed. 8°. *Philadelphia,* 1858.

Meilleur, J. B. Extracts from the tables furnished by the inspectors of primary schools in Lower Canada, 1854. *See* CANADA.

——— Report of the superintendent of education for Lower Canada, 1850–54. *See* CANADA.

Meissner, G. Die Maschinen zur Appretur, Färberei und Bleicherei; deren Bau und practische Behandlung. Handbuch für Maschinenbauer, Appreturen, Färbereien, Webereien und Bleichereien. I. 8°. Atlas, fol. *Berlin,* 1873.

——— Der practische Appreteur, Färber und Bleicher; nach den Anforderungen der Gegenwart. *Illus.* 12°. *Leipzig,* 1875.

——— Die Werkzeug- und Holzbearbeitungs-Maschinen, deren Dimensionen, Formen und Preisverhältnisse aus verschiedenen Werkstätten. Zum Gebrauche für Constructeure, besonders aber für den Industriellen bei der Auswahl neu anzuschaffender Maschinen und ihrer Bezugsquellen. *Illus.* 8°. *Leipzig,* 1876.

Meissner, N. N. W. Dictionary of the German and English languages. v. 2. *See* **Flügel,** J. G.

Meissner, Paul Traugott. Die Heitzung mit erwärmter Luft, erfunden, systematisch bearbeitet und practisch nachgewiesen, von. 3te Aufl. *Illus.* 8°; pl., fol. *Wien,* 1837.

MELBOURNE. Official record, London exhibition, 1873. *See* VICTORIA. **London** international exhibition of 1873.

——— public library. Catalogue, for 1861. 8°. *Melbourne,* 1861.

——— Victorian exhibition, 1861, Catalogue of. *See* **Archer,** W. H.

Melicher, Ludwig Josef. Die Bienenzucht in der Weltausstellung zu Paris, 1867, und die Bienencultur in Frankreich und in der Schweiz. *Illus.* 8°. *Wien,* 1868.

Meller, Prosper. Des aérostats. Navigation aérienne; chemin de fer aérostatique; aérostats captifs. 8°. *Bordeaux,* 1851.

Meller, Prosper. Notice sur les courants atmosphériques. 4°. *Paris,* 1853. pp. 32.

Melloni, Macédoine. La thermochrôse, ou la coloration calorifique démonstrée par un grand nombre d'expériences et considérée sous ses divers rapports avec la science de la chaleur rayonnante. 1e partie. 8°. *Naples,* 1830.

MELODY and measure of speech. *See* **Steele,** Josua.

MELONS. Traité complet de la culture des melons. *See* **Loisel.**

Melton, Henry. Hints on hats adapted to the heads of the people. 18°. *London,* 1865.

MEMOIRS of teachers. *See* **Barnard,** Henry.

Men (The) who advertise; an account of successful advertisers, with hints on the method of advertising. 8°. *New York,* 1870.

Menagerie (Die), oder Beschreibung und Abbildung der vierfüssigen Thiere nach lebendigen Exemplaren. Nach der zweiten Auflage aus dem Englischen uebersetzt von Dr. Franz Kottenkamp. B. 1. 16°. *Stuttgart,* 1847. **Wochenbände, 106–113.**

MENAI bridge. Observations at the Menai bridge during storms. By F. Bashforth. **Weale's papers on engineering, v. 4.**

Mendall, P. H. The New Bedford practical receipt-book. 12°. *New Bedford,* 1859.

MENDE. La société d'agriculture, industrie, sciences et arts du département de la Lozère. Bulletin, T. 9–14, 1858–63. 8°. *Mende,* 1858–63.

Mendenhall, E. Geological map of Indiana. *Cincinnati,* 1865.

——— Geological map of Ohio. *Cincinnati,* 1865.

——— Geological map of Tennessee. *Cincinnati,* 1869.

Mendenhall, George. The medical student's vade mecum: a compendium of anatomy, physiology, chemistry, poisons, materia medica, pharmacy, surgery, obstetrics, practice of medicine, diseases of the skin, etc. 5th ed. 8°. *Philadelphia,* 1857.

MENINGITIS, Epidemic, or cerebro-spinal. *See* **Stillé,** Alfred.

MENSURATION, A complete system of. *See* **Ostrander,** Tobias.

——— Elements of. *See* **Scholfield,** N.

Digitized by Google

MENSURATION, Higher. *See* **Scholfield**, N.

—— of superficies and solids. *See* **Day**, Jeremiah.

—— or square and triangle. *See* **Ticknor**, Almon.

—— Rules and tables relating to. *See* **Rankine**, William J. M.

—— Treatise on. *See* **Baker**, Thomas. **Weale's series, No. 93.**

MENTAL philosophy. *See* **Haven**, Joseph.

—— science. *See* **Bain**, Alexander.

Mentzel und v. Lengerke's verbesserter landwirthschaftlicher Hülfs- und Schreib-Kalender. Hrsg. von O. Mentzel. [2 Th. each year.] 24°. *Berlin*, 1862-76——.

Menzel, C. A. Der Bau des Eis-Kellers, sowohl in wie über der Erde und das Aufbewahren des Eises in demselben. 8°. *Halle*, 1872.

Menzies, William. A treatise on the sanitary management and utilization of sewage; comprising details of a system applicable to cottages, dwelling houses, public buildings, and towns; suggestions relating to the arterial drainage of the country and the water supply of rivers. *Illus.* 4°. *London*, 1865.

MERCANTILE dictionary; in English, Spanish and French. *See* **De Veitelle**, J.

—— law, Cyclopædia of. *See* **Waterston**, W., and **Burton**, J. H.

—— library association of New York. *See* NEW YORK (city).

—— —— —— of San Francisco. *See* SAN FRANCISCO.

—— —— —— of St. Louis. *See* ST. LOUIS, Mo.

Mercey, Frédéric de. Album de l'exposition universelle; par concours de. *See* **Brisse**, L.

MERCHANDISE. Taschenbuch für Kaufleute. *See* **Rothschild**, L.

Merchants and manufacturers of Chicago: a complete history of our mercantile and manufacturing interests, and their progress since the fire. *Illus.* fol. *Chicago*, 1873.

—— and mechanics' complete text book to the iron trade. By a practical mechanic. 24°. *Cleveland, Ohio*, 1848.

—— guide. *See* **Hogg**, J.

—— Manuel du négociant et du manufacturier. *See* **Peuchet. 53 Manuels Roret.**

Mérimée, M. J. F. L. The art of painting in oil and in fresco: a history of the various processes and materials employed from its discovery by Hubert and John Van Eyck, to the present time. Transl. from the French by W. B. Sarsfield Taylor. 12°. *London*, 1839.

Merlini, Giovanni. Il passato, il presente, e l'avvenire della industria manifatturiera in Lombardia. 8°. *Milano*, 1857.

—— Sulla costruzione dei tetti degli edificj. 8°. *Milano*, 1842.

Merrell, John P. Lecture on galvanic batteries. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Merrifield, *Mrs.* M. P. The art of fresco painting as practised by the old Italian and Spanish masters, with a preliminary inquiry into the nature of the colors used in fresco painting. 8°. *London*, 1846.

—— Original treatises, dating from the 12th to the 18th centuries, on the arts of painting, in oil, miniature, mosaic, and on glass; of gilding, dyeing, and the preparation of colours and artificial gems; preceded by a general introduction; with translations, prefaces and notes. v. 2. 8°. *London*, 1849.

—— Practical directions for portrait painting in water-colours. 9th ed. 12°. *London*, 1859.

—— Treatise on painting; transl. by. *See* **Cennini**, C.

Merrill, A. P. Lectures on fever, delivered in the Memphis medical college in 1853-1856. 12°. *New York*, 1865.

Merritt, W. K., and co. Decimal calculations for oats, weighing from 16 lbs. to 38 lbs. sm. 4°. 1865. *n. p.*

Merry, W. A. The mercantile calculator: or commercial tables arranged for the British colonies, particularly adapted to the forwarding, iron, ashes, drug, and grocery trades. 8°. *Montreal*, 1847.

Merryweather, George. An essay explanatory of the tempest prognosticator in the building of the great exhibition. 8°. *London*, 1851.

Mersan, — de. Manuel du chasseur. *Illus.* 4e éd. 18°. *Paris*, 1828. **120* Manuels Roret.**

Meryon, John. Harbor of Rye. **Weale's papers on engineering, v. 4.**

METAL plating. *See, also*, **Galvanoplasty.**

—— —— **Abridgments English Patents, No. 23.**

Digitized by Google

METAL plating. Kunst des Vergoldens, Versilberns, etc. *See* **Schmidt**, C. H. **133 Neuer Schauplatz der Künste.**

—— turning. Handbuch der Metalldreherei. *See* **Hartmann**, C. F. A. **186 Neuer Schauplatz der Künste.**

—— working. Atlas für mechanische Technologie: Metall-Verarbeitung. *See* **Kronauer**, J. H.

METALLIC cartridges. *See* UNITED STATES. **War dept. Ordnance memoranda, No. 14.**

METALLOIDS, Manual of. *See* **Apjohn**, James.

METALLURGY. Anweisung für Blecharbeiter, etc. *See* **Leonhard**, August.

—— Art of extracting metals from their ores. *See* **Percy**, John.

—— Bessemeranlage auf der Vulcan-Hütte zu St. Louis. *See* **Wedding**, H.

—— Dokumente betreffend den Hohofen zur Darstellung von Roheisen. *See* **Schinz**, C.

—— Das Eisenhüttenwesen der Vereinigten Staaten von Nordamerika. *See* **Tunner**, P. von.

—— Elements of. *See* **Phillips**, J. Arthur.

—— État actuel de la métallurgie en Europe. *See* **Cerfberr**, A.

—— Grundriss der allgemeinen Hüttenkunde. *See* **Kerl**, Bruno.

—— Handbuch der Eisenhüttengewerbskunde, etc. *See* **Hartmann**, Carl F. A.

—— Handbuch der praktischen Metallurgie. *See* **Hartmann**, C. F. A. **80, 81 Neuer Schauplatz der Künste.**

—— Hohofen und Hammermeister. *See* **Hartmann**, C. F. A. **161 Neuer Schauplatz der Künste.**

—— Die Hüttenwesens-Maschinen. *See* **Hauer**, Julius v.

—— Lehrbuch der chemischen Metallurgie. *See* **Rammelsberg**, C. F.

—— Lehrbuch der Metallurgie. *See* **Scheerer**, Th.

—— A manual of. *See* **Greenwood**, William H. **Putnam's advanced science series, No. 19.**

—— Manual of. *See* **Makins**, G. H.

—— Manual of. *See* **Phillips**, J. A.

—— Metallgiesserei. *See* **Hartmann**, C. F. A. **103 Neuer Schauplatz der Künste.**

—— Metallurgical processes and products. By H. T. De la Beche. *See* **Lectures** on results of the exhibition [1851].

METALLURGY of iron. Handbuch der Eisenhüttenkunde. *See* **Percy**, John.

—— of iron and steel. *See* **Osborn**, H. S.

—— of lead. Die Metallurgie des Bleies. *See* **Percy**, John.

—— of lead, silver, copper and zinc, Report on. By H. Painter. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 4.**

—— Products of. Hütten-Erzeugnisse. *See* **Leonhard**, K. C. v.

—— Puddel- und Walzmeister. *See* **Hartmann**, C. F. A. **241 Neuer Schauplatz der Künste.**

—— System der Metallurgie geschichtlich, statistisch, theoretisch und technisch. *See* **Karsten**, C. J. B.

—— Traitement des minerais métalliques. *See* **Rivot**, L. E.

—— Treatise on. *See* **Overman**, F.

METALS and alloys (excepting iron and steel). **Abridgments English Patents, No. 18.**

—— L'aluminium et les métaux alcalins. See **Tissier**, C. and A.

—— De re metallica. *See* **Agricola**, Georgius.

—— Erzeugnisse von Kupfer, Zink, Blei, Zinn, Nickel. Von Gustav Rosthorn. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

—— Fatigue of metals under strains. *See* **Spangenburg**, Ludwig. **Van Nostrand's science series, v. 23.**

—— Fleta minor. The laws of art and nature in knowing, judging, assaying, fining, refining and inlarging the bodies of confined metals. *See* **Pettus**, John.

—— Handbuch des Gürtlers und Bronce-arbeiters. *See* **Wallack**, A. **108 Neuer Schauplatz der Künste.**

—— Improvement and state of manufacture in metal. *See* **Holland**, J. **Lardner's cabinet cyclopædia, v. 129-131.**

—— Journal für Metallarbeiter. *See* **Voigt**, B. F.

—— Manuel du travail des métaux. *See* **Lardner**, D. **46 Manuels Roret.**

—— The metallic wealth of the United States compared with that of other countries. *See* **Whitney**, J. D.

—— Metallwaaren. Von Carl Haas. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

—— Metal-worker's assistant. *See* **Byrne**, O.

Digitized by Google

METALS. Les métaux, mines, mineurs, et industries métallurgiques. *See* **With,** Émile.

——— Musterzeichnungen von Werkzeugen für Metallarbeiter. *See* HESSE-DARMSTADT.

——— The playbook of. *See* **Pepper,** John Henry.

——— The precious. *See* **Jacob,** William.

——— Properties of metals for cannon. *See* **Rodman,** T. J.

——— Strength and other properties of metals for cannon. *See* UNITED STATES. **War** department.

——— Strength of. *See* **Tredgold,** T.

——— Useful metals and their alloys. *See* **Scoffern,** J., and others.

Metcalf, John, A life of. *See* **Smiles,** Samuel. **Lives** of the engineers, v. 3.

Metcalf, Samuel S. Caloric; its mechanical, chemical and vital agencies in the phenomena of nature. 2 v. 8°. *London,* 1843. Another ed., 1859.

Metcalf, Theron. Law of evidence; notes by. *See* **Starkie,** T.

——— Principles of the law of contracts as applied by courts of law. 8°. *New York,* 1868.

METEOR, The steamship, libelled for alleged violation of the neutrality act. Report of the case. *See* **Balch,** F. V.

METEORIC astronomy. A treatise on shooting stars, fire-balls, and aerolites. *See* **Kirkwood,** Daniel.

METEOROLOGICAL instruments, Catalogue of. *See* **Casella,** L. P.

METEOROLOGY. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.

——— Der Barometerstand und die barometrische Windrose Ostfrieslands. *See* **Prestel,** M. A. F. EMDEN. **Naturf. Gesells. Kleine Schriften, 6.**

——— Bulletin météorologique mensuel de l'observatoire de l'université d'Upsal. *See* UPSALA.

——— Climatology of the United States, and of the temperate latitudes of the North American continent. *See* **Blodget,** Lorin.

——— A complete course of. *See* **Kaemtz,** L. F.

——— Directions for meteorological observations, etc. **Smiths'n misc. coll., v. 1.**

——— Discussion of the magnetic and meteorological observations made at Girard college, 1840-45. By A. D. Bache. **Smiths'n contrib., v. 11.**

——— Elements of. *See* **Brocklesby,** John.

——— Elements of. *See* **Daniell,** John Frederic.

——— Handbooks of natural philosophy and astronomy. *See* **Lardner,** D.

——— A handy book of. *See* **Buchan,** Alexander.

——— Introduction to. *See* **Thomson,** David Purdie.

——— Lehrbuch der Physik und Meteorologie. *See* **Pouillet,** C. S. M.

——— Manual of. *See* **Lardner,** D., and **Walker,** C. V. **Lardner's cabinet cyclopædia, v. 108, 109.**

——— Marche de la température à l'air, dans le sol et au fond d'un puits. *See* **Pourian,** A. F.

——— Meteorological account of the weather in Philadelphia. *See* **Peirce,** Charles.

——— Meteorological essays. *See* **Arago,** François.

——— Meteorological observations, 1854-59. *See* UNITED STATES. **Interior** dept. Patent office.

——— Meteorological observations and essays. *See* **Dalton,** John.

——— Meteorological observations in the Arctic seas by E. K. Kane. Discussed by C. A. Schott. **Smiths'n contrib., v. 11.**

——— Meteorological observations made at Providence, Rhode Island, 1831-60. By A. Caswell. **Smiths'n contrib., v. 12.**

——— Meteorological observations near Washington, Arkansas, 1840-59. By N. D. Smith. **Smiths'n contrib., v. 12.**

——— Meteorological observatory of New York, Report of. *See* NEW YORK (city).

——— Meteorological reports and weather maps, Use of. *See* UNITED STATES. **War** department.

——— Meteorologische Beobachtungen. *See* CHRISTIANIA.

——— Meteorologische Beobachtungen zu Clausthal. *See* **Schoof,** C. L. EMDEN. **Naturf. Gesells. Kleine Schriften, 7.**

——— Meteorologische waarnemingen in Nederland. *See* UTRECHT.

——— Physical atlas. *See* **Johnston,** A. K.

——— Die Regenverhältnisse des Königreichs Hannover. *See* EMDEN. **Naturforschende** Gesellschaft.

——— Resultate aus den meteorologischen Untersuchungen. *See* **Lamont,** J.

Digitized by Google

METEOROLOGY. Results of meteorological observations made at the magnetical observatory at Toronto. *See* TORONTO.

——— Results of meteorological observations. *See* UNITED STATES. **Navy** department.

——— Storms: their nature, classification and laws. *See* **Blasius**, William.

——— A treatise on. *See* **Loomis**, Elias.

——— A treatise on. *See* **Morris**, Albert J. T.

——— Treatise on. By J. Scoffern. *See* **Young**, J. R., and others. **Orr's circle of the sciences, v. 5.**

——— Verbreitung des Moorrauchs vom 20. bis 26. Mai 1860, u. s. w. *See* **Prestel**, M. A. F. EMDEN. **Naturf. Gesells. Kleine Schriften, 8.**

——— Windrosen des südlichen Norwegens. *See* **Seue**, C. de.

——— Witterungs-Beobachtungen zu Emden. *See* **Prestel**, M. A. F. EMDEN. **Naturf. Gesells. Kleine Schriften, 9.**

METEORS, aerolites and falling stars. *See* **Phipson**, T. L.

——— ——— storms, etc. *See* **Zurcher** and **Margollé. Illustrated library of wonders, v. 19.**

——— Recherches sur les météores. *See* **Coulvier-Gravier**, M.

Meteyard, Eliza. The life of Josiah Wedgwood. With an introductory sketch of the art of pottery in England. *Illus.* [2 v.] v. 1. 8°. *London*, 1865.

——— Wedgwood and his works: a selection of his plaques, cameos, medallions, vases, etc. From the designs of Flaxman and others, reproduced in permanent photography by the autotype process. With a sketch of his life. 4°. *London*, 1873.

Metger, H. Jahresbericht der naturforschenden Gesellschaft *See* EMDEN.

Metric (The) system; a compilation. By M. Lamotte. 18°. *Philadelphia*, 1867. pp. 37.

——— (The) system of weights and measures. *See* **Walton**, G. A.

——— (The) system of weights and measuses. *See* **Newton**, H. A.

——— system, The universal. *See* **Colin**, Alfred.

Metz, A. The anatomy and histology of the human eye. 8°. *Philadelphia*, 1868.

METZ. Académie impériale de Metz. Mémoires. Agriculture, beaux-arts, littérature, histoire, archéologie, sciences. 2e série, année 1-19, 1852-71 [except années 11, 13, 16]. 3e série, année 1-3, 1872-75. Tables, 1819-71. 8°. *Metz*, 1852-75.

Meudra, H. Ponts militaires et passages de rivières. 8°. *Paris*, 1861.

MEXICO. History and archæology of. By B. Mayer. **Smiths'n contrib., v. 9.**

——— Observations on terrestrial magnetism in. By A. Sonntag. **Smiths'n contrib., v. 11.**

——— Production des métaux précieux du Mexique. *See* **Duport**, St. Clair.

Meyer, Johann Heinrich. Journal für Buchdruckerkunst. *See* **Journal.**

Meyer, Moritz. Expériences sur la fabrication et durée des bouches à feu en fer et en bronze. Traduit de l'allemand par Ravichio de Peretsdorf. *Illus.* 8°. *Paris*, 1834.

——— Manuel historique de la technologie des armes à feu. Traduit de l'allemand par M. Rieffel. Partie 1-2. 8°. *Paris*, 1837.

Meyer, Rud. Vergoldung, Versilberung, Verplatinirung, Verkupferung und Verzinnung ohne Galvanismus und Apparate. 8°. *Quedlinburg und Leipzig*, 1845.

MEZZOTINTO, A history of the art of. *See* **Chelsum**, James.

MIASMA. Die Stadt-Gifte und deren Unwandlung in neue Geld- und Lebens-Quellen unter Leitung eines deutschen Gesundheits-Parlamentes. *See* **Beta**, H.

Micé, L. Rapport méthodique sur les progrès de la chimie organique pure en 1868. Avec quelques détails sur la marche de la chimie physiologique. 8°. *Paris*, 1869.

Michaëlis, W. Die hydraulischen Mörtel, insbesondere der Portland-Cement in chemisch-technischer Beziehung für Fabrikanten, Bau-Techniker, Ingenieure und Chemiker. 8°. *Leipzig*, 1869.

Michaux, F. Andrew. The North American sylva: a description of the forest trees of the United States, Canada and Nova Scotia. Transl. from the French, with notes, by J. Jay Smith. 3 v. roy. 8°. *Philadelphia*, 1853.

Michel, —. L'art de fabriquer la chandelle. 18°. *Paris*, 1823. **Encyclopédie populaire, v. 15.**

Michell, J. A treatise of artificial magnets. 2d ed. 8°. *Cambridge*, 1751. [?]

MICHIGAN. Census and statistics of the state of Michigan. May, 1854. 8°. *Lansing*, 1854.

Digitized by Google

MICHIGAN, Report on the Lake Superior land district. *See* UNITED STATES. **Interior** department.

MICROGRAPHIC dictionary. *See* **Griffith**, J. W., and **Henfrey**, A.

MICROMETERS. Description de différents micromètres. Par M. F. d'A. d'A. de Chaulnes. PARIS. **Acad. des sc.; arts et métiers, v. 42 and 18.**

MICROSCOPE (The) and its application to clinical medicine. *See* **Beale**, L.

——— The; and its application to vegetable anatomy and physiology. *See* **Schacht**, Hermann.

——— and its revelations, The. *See* **Carpenter**, W. B.

——— and microscopic objects, The. *See* **Notcutt**, W. L.

——— Aufbewahrung mikroskopischer Objecte. *See* **Welcker**, Hermann.

——— La chambre noire et le microscope. *See* **Gerard**, Jules.

——— De la construction et de l'emploi du microscope. *See* **Hannover**, Adolphe.

——— Description d'un microscope. Par M. F. d'A. d'A. de Chaulnes. PARIS. **Acad. des sc.; arts et métiers, v. 42 and 18.**

——— Description of the compound. *See* **Mann**, J., and **Ayscough**, J.

——— The; descriptions of various objects of especial interest and beauty, adapted for microscopic observation. *See* **Ward**, *Mrs.*

——— Elementary text-book of the. *See* **Griffith**, J. W.

——— Essays on. *See* **Adams**, George.

——— Half-hours with the. *See* **West**, Tuffen.

——— How to work the. *See* **Beale**, L. S.

——— The; its history, construction, and application. *See* **Hogg**, Jabez.

——— Introduction to the use of the. *See* **Tulk**, Alfred.

——— Lecture on. *See* **Pereira**, J.

——— Das Mikroskop in seiner Bedeutung für die Erweiterung der Naturerkenntniss. *See* **Reinsch**, Paul.

——— Das Mikroskop. Theorie, Gebrauch, u. s. w. *See* **Harting**, P.

——— Das Mikroskop und seine Anwendung. *See* **Schacht**, H.

——— Molecular and microscopic science. *See* **Somerville**, *Mrs.* Mary.

——— One thousand objects for the. *See* **Cooke**, M. C.

——— Traité pratique du microscope. *See* **Mandl**, L.

MICROSCOPE. Treatise on achromatic microscopes. *See* **Beck**, Richard.

——— Treatise on the use of. *See* **Quekett**, J. **Library of illustrated standard scientific works, v. 6.**

MICROSCOPES, and the discoveries made thereby. *See* **Baker**, Henry.

Microscopic journal (The) and structural record for 1841–42. *See* **Cooper**, Daniel.

——— objects; animal, vegetable, and mineral, with instructions for preparing and viewing them. 12°. *London*, 1847.

——— science, Quarterly journal of. *See* **Quarterly.**

——— society of London, Transactions of the. *See* LONDON.

MICROSCOPY. Amusement microscopique. *See* **Ledermuller**, Martin Frobène.

——— Handbuch der Mikroskopie. *See* **Quekett, J. 180 Neuer Schauplatz der Künste.**

——— Hundert mikroskopische Praeparate aus dem Thier- und Pflanzenreich. *See* **Hundert.**

——— Lehrbuch der mikroskopischen Photographie. *See* **Reichardt**, Oscar, and **Stürenburg**, Carl.

——— List of microscopic preparations of the army medical museum, exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

——— Microscopic illustrations of living objects. *See* **Pritchard**, Andrew.

——— Microscopical examination of soundings off the Atlantic coast. By J. W. Bailey. **Smiths'n contrib., v. 2.**

——— Microscopical observations made in South Carolina, Georgia, and Florida. By J. W. Bailey. **Smiths'n contrib., v. 2.**

——— Microscopical researches into the accordance in the structure and growth of animals and plants. *See* **Schwann**, Th.

——— Die mikroskopischen Thiere des Süsswasser-Aquariums. *See* **Schoch**, Gustav.

——— The microscopist. *See* **Wythes**, Joseph H.

——— Microscopist's companion. *See* **Klug**, John.

——— Monthly microscopical journal. *See* **Monthly.**

——— New species and localities of microscopical organisms. By J. W. Bailey. **Smiths'n contrib., v. 7.**

——— Photographie als Hülfsmittel mikroskopischer Forschungen. *See* **Gerlach**, J.

Digitized by Google

Middlesex mechanic association, Lowell, Mass. A catalogue of the library, with the act of incorporation, and the constitution and by-laws of said institution; instituted October, 1825. 8°. *Lowell*, 1853.

——— mechanic association. Reports of the first exhibition, held in the city of Lowell, September, 1851. 12°. *Lowell*, 1862.

Midolle, J. Album du moyen âge. fol. *Strasbourg*, 1836.

MIDWIFERY. *See, also,* **Obstetrics.**

——— A compendious system of. *See* **Dewees,** William P.

——— Theory and practice of. *See* **Churchill,** Fleetwood.

——— Treatise on. *See* **Cazeaux,** P.

Miege, Guy. The great French dictionary, in two parts. Part 1. French and English. Part. 2. English and French; according to the ancient and modern orthography. Wherein each language is set forth in its greatest latitude: the various senses of words, both proper and figurative, are orderly digested; and illustrated with apposite phrases, and proverbs: the hard words explained. fol. *London*, 1688.

Mielichhofer, Carl. Anleitung zur Schiffbau-Kunst. *Illus.* 8°. *Wien*, 1857.

Mierzinski, Stanislaus. Die Fabrikation der aetherischen Oele und Riechstoffe zum Gebrauche für Fabrikanten, Chemiker, Apotheker, Droguisten und Parfümisten. 8°. *Berlin*, 1872.

Mifflin, Samuel W. Method of location, or modes of describing and adjusting railway curves and tangents. 2d ed. 16°. *Philadelphia*, 1850. pp. 47.

Migotti, Josef. Fertige Kleider. Kinder-Kleider. Cravaten und Halsbinden. Camaschen. Wäsche. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

MILAN. Collezione degli atti delle solenni distribuzioni de' premj d'industria fatte in Milano ed in Venezia dall'anno 1806 in avanti. Tomo 1–8. 8°. *Milano, Venezia*, 1824–57.

——— I. R. istituto Lombardo di scienze, lettere ed arti. Atti. T. 1–3. 4°. *Milano*, 1858–62.

——— ——— Giornale. T. 1–9. 8°. *Milano*, 1841–56.

MILAN. I. R. istituto Lombardo di scienze, lettere ed arti. Memorie. T. 1, 2, 4–12. [T. 7–9 are 2d series; 10–12, 3d series, which is entitled 'di scienze e lettere', and divided into 'classe di lettere e scienze morali e politiche' and 'classe di scienze matematiche e naturali'; both classes for each vol. bound together.] 4°. *Milano*, 1843–73.

——— ——— Rendiconti. Serie 1, T. 1–4. Serie 2, T. 1–8. [The first series is divided into 'classe di lettere e scienze morali e politiche' and 'classe di scienze matematiche e naturale'; both classes for each year bound together.] 8°. *Milano*, 1864–75 ——.

Milburn, M. M. The cow, dairy husbandry and cattle breeding. *See* **Saxton's rural handbooks, v. 1.**

Miles, Henry H. The ventilation of dwelling houses and schools; with remarks upon sanitary improvements. 8°. *Montreal*, 1858.

Miles, William. The horse's foot: how to keep it sound; with an appendix on shoeing in general, and hunters in particular. *Illus.* 8°. *London*, 1856.

——— A plain treatise on horse-shoeing. *Illus.* 8°. *London*, 1855. 5th ed. 1865.

Miliker, Hermann. Die österreichischen Telegraphen-Anstalten. 8°. *Wien*, 1866.

MILITARY affairs. U. S. service magazine. *See* UNITED STATES.

——— and religious life in the middle ages. *See* **Lacroix,** Paul.

——— art and history, Elements of. *See* **Delàbarre-Duparcq,** N. É.

——— art. Arts and sciences of the antients. *See* **Rollin,** Charles.

——— biography. Lives of British military commanders. *See* **Gleig,** G. R. **Lardner's cabinet cyclopædia, v. 67–69.**

——— commission to Europe in 1854–1856. Report of Major Richard Delafield. *See* UNITED STATES. **War department.**

——— commission to Europe, 1855–1856. Report of Capt. George B. McClellan. *See* UNITED STATES. **War department.**

——— ——— Report of Major Alfred Mordecai. *See* UNITED STATES. **War department.**

——— dictionary. *See* **Scott,** H. L.

——— ——— in French and English. *See* **James,** Charles.

——— ———, Technical. French-English and English-French. *See* **Burn,** R.

Digitized by Google

MILITARY dictionary, Technological. German-English-French. *See* **Duckett**, G. F.

——— encyclopædia. *See* **Stocqueler**, J. H.

——— engineering, Elementary course of. *See* **Mahan**, D. H.

——— ——— Geniewesen. Von Moriz Brunner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

——— ——— Handbook of. *See* **Forrest**, R.

——— equipment. Heeresbekleidungs- und Ausrüstungswesen. Von Carl Mayer. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

——— instruction. Militairunterrichtswesen. Von Moriz Brunner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

——— law, and the constitution and practice of courts-martial. *See* **De Hart**, William C.

——— ——— and the practice of courts-martial. *See* **Benét**, S. V.

——— laws of the United States. *See* **Callan**, John F.

——— maps. Militair-Kartographie. Von Jos. Zaffauk. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

——— medical and surgical essays. *See* **Hammond**, William A.

——— pioneering. Pionierwesen. Von Emerich Zinner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

——— science. Aide-mémoire to the military sciences. *See* **Aide-mémoire.**

——— ——— Fortification. Von Moriz Brunner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

——— ——— Journal des armes spéciales. *See* **Journal.**

——— ——— Militia Romana. *See* **Lipsius**, Justus.

——— ——— The national defences. *See* **Bidder**, G. P., *jr.*

——— statistics of the United States of America. *See* **Elliott**, E. B.

MILITIA, Dictionary of the distinguished officers of the. *See* **Gardner**, C. K.

——— Dictionary of the U. S. army officers, etc. *See* **Gardner**, Charles K.

MILK. Choix des vaches laitières. *See* **Magne**, J. H.

MILK. Die Milchwirthschaft. *See* **Schreibers**, Joseph v.

——— sickness. *See* **Rowe**, Willis.

——— trade of New York and vicinity. *See* **Mullaly**, John.

Mill, John Stuart. Principles of political economy, with some of their applications to social philosophy. 2 v. 8°. *Boston*, 1848.

Millar, W. J. Principles of mechanics and their application to prime movers, naval architecture, iron bridges, water supply, etc. Thermodynamics, with special reference to the steam engine; being an abstract of lectures delivered to the class of civil engineering in the University of Glasgow. 12°. *London*, 1874.

Miller, Henry. The principles and practice of obstetrics; and treatment of chronic inflammation of the uterus, considered as a frequent cause of abortion. 8°. *Philadelphia*, 1858.

——— A theoretical and practical treatise on human parturition. 8°. *Louisville*, 1849.

Miller, James. The practice of surgery. 4th Amer. from last Edinburgh ed. 8°. *Philadelphia*, 1857.

Miller, Philip. Figures of the most beautiful, useful, and uncommon plants described in the 'Gardener's dictionary.' *Illus.* 2 v. fol. *London*, 1760.

——— The gardener's dictionary; containing the methods of cultivating and improving all sorts of trees, plants and flowers, for the kitchen, fruit and pleasure gardens. 4th ed. abridged from the last folio ed. 3 v. 8°. *London*, 1754.

Miller, W. H. Mineralogy, by Sir H. De la Beche; rev. by. *See* **Herschel**, J. F. W. **Manual** of scientific enquiry.

Miller, William Allen. Elements of chemistry, theoretical and practical. Rev. by Herbert McLeod. v. 1. Chemical physics. v. 2. Inorganic chemistry. v. 3. Organic chemistry. v. 1, 3d ed., 1863; v. 2, 3d ed., 1864; v. 3, 2d ed., 1862. 8°. *London*, 1862–64. Another copy, v. 1, 5th ed., 1872; v. 2, 4th ed., 1868; v. 3, 4th ed., 1869.

Miller-Hanenfels, Albert von. Höhere Markscheidekunst. Praktisch-theoretische Anleitung, beim Markscheiden die vermeidlichen Fehler zu umgehen, die unvermeidlichen aber in einfacher und

Digitized by Google

Miller-Hanenfels, A. von—Continued. streng wissenschaftlicher Weise zu verbessern. 8°. *Wien*, 1863.

Millet-Robinet, *Mme.* Cora. Le jardinier des fenêtres des appartements et des petits jardins. 3e éd. 18°. *Paris.*

——— Manuel de l'éléveur des oiseaux de basse-cour, et du lapin domestique. 2e éd. 12°. *Paris, n. d.*

MILLING. *See, also,* **Mills.**

——— and millwork, Treatise on. *See* **Fairbairn,** W.

——— Art du meunier. Par P. J. Malouin. PARIS. **Acad. roy. des sc.; arts et métiers, v. 41 and 1.**

——— Guide du meunier et du constructeur de moulins. *See* **Benoît,** P. M. N.

——— Manuel du meunier. *See* **Benoît,** P. M. N., and **Julia de Fontenelle,** J. S. E. **34 Manuels Roret.**

——— Mémoire sur la meunerie, la boulangerie, et conservation des grains et des farines. *See* **Rollet,** Augin.

——— Miller's, millwright's and engineer's guide. *See* **Pallett,** Henry.

——— Millwright and miller's guide. *See* **Evans,** O.

——— Mühlenbaukunst. *See* **Schlegel,** C. F.

——— Musterzeichnungen von Mühlen. *See* HESSE-DARMSTADT.

——— Praktischer Mühlenbauer oder Zeugarbeiter. *See* **Bergmann,** L. **99 Neuer Schauplatz der Künste.**

——— Theatrum Machinarum Molarium, oder Schauplatz der Mühlen-Bau-Kunst, etc. *See* **Beyern,** Johann Matthias.

——— Treatise on. *See* **Banks,** J.

——— Der Wasser-Mahlmühlen-Bau. *See* **Lohmann,** A. **223 Neuer Schauplatz der Künste.**

Millington, John. An epitome of the elementary principles of natural and experimental philosophy, with a copious account of the steam engine. *Illus.* 8°. *London*, 1823.

——— Treatise on hydraulics. *See* LONDON. **Society of useful knowledge, v. 1.**

Millon, E., and **Reiset,** J. Annuaire de chimie, comprenant les applications de cette science à la médecine et à la pharmacie; répertoire des découvertes et des nouveaux travaux en chimie faits dans les divers parties de l'Europe; avec la collaboration de M. J. Nicklès. 8°. *Paris*, 1849-50.

Mills, R. H. Resources of Ireland. *See* **Sproule,** J.

MILLS. American miller and millwright's assistant. *See* **Hughes,** W. C.

——— Englisch-amerikanishe Mahlmühlen, sowie von den neuesten Einrichtungen der Oel-, Papier-, Loh- und Sägemühlen. *See* **Hartmann,** C. F. A. **181 Neuer Schauplatz der Künste.**

——— Essays on, and other machinery. *See* **Buchanan,** R.

——— Handbuch der Mühlenbaukunst und der Mehlfabrication. *See* **Weinholz,** W. **57, 58 Neuer Schauplatz der Künste.**

——— Manual of machinery and millwork. *See* **Rankine,** William J. M.

Milly, Nicholas Christiern de Thy, *Comte* de. Art de la porcelaine. PARIS. **Acad. roy. des sc.; arts et métiers, v. 1 and 8.**

Milne, Colin. A botanical dictionary: or elements of systematic and philosophical botany. 3d ed. *Illus.* 8°. *London*, 1805.

Milton, Thomas, **Crunden,** J., and **Columbiani,** P. The chimney-piece-maker's daily assistant; a treasury of new designs for chimney-pieces. *Illus.* 8°. *London*, 1766.

MILWAUKEE. The young men's association. Catalogue of the library. 8°. *Milwaukee*, 1861. 2d supplement, 1865.

MIND in nature: or the origin of life, and the mode of development of animals. *See* **Clark,** Henry James.

Miner, T. B. The American bee keeper's manual; a practical treatise on the history and domestic economy of the honey-bee. *Illus.* 12°. *New York*, 1849.

MINERAL oils. Die Industrie der Mineralöle, des Petroleums, Paraffins und der Harze, etc. *See* **Perutz,** H.

——— resources of the states and territories west of the Rocky Mountains. *See* **Raymond,** Rossiter W.

——— water. Catalogue of Puffer's soda and mineral water apparatus. *See* Puffer, A. D.

——— waters. Die Fabrikation der künstlichen Mineralwässer und anderer mousirender Getränke. *See* **Hirsch,** B.

——— ——— Lehrbuch der Fabrication von Mineralwässern. *See* **Schultze,** H. and R.

——— ——— Natürliche und künstliche Mineralwässer. *See* **Blum,** Wilhelm.

Digitized by Google

MINERAL waters. Vollständige Anleitung zur Fabrikation künstlicher Mineralwässer. *See* **Hager**, Hermann.

MINERALOGY. Abhandlungen des zoologisch-mineralogischen Vereins. *See* REGENSBURG.

——— and crystallography, Science of. By J. Tennant and W. Mitchell. *See* **Ansted**, D. T., and others. **Orr's circle of the sciences, v. 4.**

——— and geology. *See* **Cleaveland**, Parker.

——— Annual report of the progress of. *See* **Liebig**, J. v., and **Kopp**, H.

——— Assaying and mining. *See* **Overman**, Frederic.

——— By Sir H. De la Beche. *See* **Herschel**, J. F. W. **Manual** of scientific enquiry.

——— Correspondenz-Blatt des zoologisch-mineralogischen Vereines. *See* REGENSBURG.

——— Dictionary of geology and. *See* **Humble**, W.

——— Elemente der Mineralogie. *See* **Neumann**, Carl Friedrich.

——— Glossary of. *See* **Bristow**, H. W.

——— Jahresbericht über die Fortschritte der Mineralogie. *See* **Liebig**, J. v., and **Kopp**, H.

——— of the ancients. *See* **Moore**, N. F.

——— Schriften der Gesellschaft für Mineralogie. *See* ST. PETERSBURG.

——— simplified. *See* **Kobell**, F. von.

——— System of. *See* **Dana**, J. D.

——— Traité élémentaire de minéralogie avec des applications aux arts. *See* **Brongniart**, Alexandre.

——— Treatise on. *See* **Varley**, D. **Weale's series, No. 45.**

——— Treatise on the use of the blowpipe in chemical and mineral analysis. *See* **Griffin**, John.

——— Verhandlungen der mineralogischen Gesellschaft. *See* ST. PETERSBURG.

MINERALS, Artificial. Hütten-Erzeugnisse, und andere auf künstlichem Wege gebildete Mineralien. *See* **Leonhard**, K. C. v.

——— The blowpipe characters of. *See* **Smith**, A.

——— Chemical analysis of. *See* **Kunz**, Otto.

——— Die Mineralien Kärntens. *See* **Hoefer**, Hanns.

——— Tafeln zur Bestimmung der Mineralien, mittelst einfacher, chemischer Versuche auf trockenem und nassem Wege. *See* **Kobell**, Franz von.

——— Verzeichniss von verkäuflichen Mineralien, Gebirgsarten, Petrefacten, etc. *See* **Krantz**, A.

MINER'S dictionary. *See* **Hooson**, William.

——— handbook. *See* **Silversmith**, Julius.

MINES. *See, also,* **Mining.**

——— A compleat treatise of. *See* **Manningham**, Henry.

——— Coup d'œil géologique sur les mines de la monarchie autrichienne. *See* **Hauer**, Fr. de, and **Foetterle**, Fr.

——— Dictionnaire des mines, etc. *See* **Laboulaye**, C. L.

——— Die Grubenzimmerung. *See* **Sickel**, C. A.

——— Mine engineering. *See* **Budge**, J.

——— Minières, carrières, usines minéralurgiques, etc. 8°. *Bruxelles*, 1841.

——— Minières, usines minéralurgiques, et machines à vapeur. *See* BELGIUM.

——— of California, Twelve years in the. *See* **Patterson**, Lawson B.

——— Ventilation des mines, etc. *See* **Devillez**, A.

——— The ventilation of. *See* **Moore**, R.

——— Ventilation of coal. *See* **Scott**, R.

MINIATURE painting on ivory, The art of. *See* **Parsey**, Arthur.

MINIATURES. Art de faire des miniatures. *See* **Pinot**, E.

MINING. *See, also,* **Mines.**

——— and metallurgy. Bauliche Anlagen auf den Berg-Hütten und Salinen-Werken in Preussen. *See* **Schönfelder**, von.

——— and metallurgy. Bergbau- und Hüttenwesen. Montanproducte. Von Frz. v. Vivenot. *See* VIENNA. **Gen.-Dir. d. Weltausst. 1873. Bericht. Gruppe 1.**

——— and metallurgy of gold and silver. *See* **Phillips**, J. Arthur.

——— association. *See* Cherry, Cummings and James.

——— Berg- und hüttenmännischer Atlas. *See* **Hartmann**, C. H.

——— Cyclopædia of. *See* **Tomlinson**, C.

——— Dictionary of terms used in. *See* **Weale**, J. **Weale's series, Nos. 36–39.**

——— English and foreign mining glossary. *See* **English.**

Digitized by Google

MINING. Entwurf einer Minentheorie, gemeinsam für Pulver und Dynamit, etc. *See* **Hagen,** Wilhelm, von Hagenburg.

——— Erdbohrkunde. *See* **Beer,** A. H.

——— Erfahrungen im berg- und hüttenmännischen Maschinen-Bau- und Aufbereitungswesen. *See* **Rittinger,** P.

——— Die Fördermaschinen der Bergwerke. *See* **Hauer,** Julius v.

——— Handbuch der Bergbau- und Hüttenkunde. *See* **Hartmann,** C. A.

——— Handbuch der Bergmaschinenmechanik. *See* **Weisbach,** Julius.

——— Idioticon der österreichischen Berg- und Hüttensprache. *See* **Scheuchenstuel,** C. v.

——— industry. *See* UNITED STATES. **Interior dept. Geol. survey. F. V. Hayden. v. 3.**

——— Jahresbericht über die Fortschritte der Bergbaukunst im Jahre 1859. *See* **Hartmann,** Carl F. A.

——— Katechismus der Bergbaukunde. *See* **Stöhr,** Emil.

——— (The) magazine; devoted to mines, mining operations, metallurgy, etc. v. 1-11. [v. 1-9 edited and conducted by William J. Tenney; v. 10, 11, called 'Mining and statistic magazine', by Thomas McElrath. Continued as 'Mining magazine and journal of geology'.] 8°. *New York*, 1853-59.

——— (The) magazine and journal of geology. Edited by William P. Blake. 2d series, v. 1. 8°. *New York and New Haven*, 1860. [Continuation of 'Mining magazine'.]

——— processes and products. By H. T. De la Beche. *See* **Lectures** on results of the exhibition [1851].

——— Records of. *See* **Taylor,** John.

——— Report on. By H. F. Q. D'Aligny and others. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 4.**

——— Der treue Führer beim Schürfen. *See* **Hartmann,** C. F. A. **160 Neuer Schauplatz der Künste.**

——— ventilation, etc. *See* **Scoffern,** J., and others.

——— Vollständige Anleitung zur Bergbaukunst. *See* **Getzschmann,** Moriz Ferd.

——— Zeitschrift für das Berg-Hütten- und Salinenwesen. *See* PRUSSIA. **Ministerium** für Handel.

Minor, Daniel Kimball. American railroad journal; ed. by. *See* **American.**

Minshaeus, Joannes. Minshaei emendatio vel a mendis expurgatio, seu augmentatio sui ductoris in lingua, cum illarum harmonia et etymologijs, originationibus, rationibus et derivationibus in novem linguis, viz: Anglica, Belgica, Germanica, Gallica, Italica, Hispanica, Latina, Graeca, Hebraea, etc. Secunda editio. fol. *Londini*, 1627.

MINT, The royal. *See* **Ansell,** George Frederick.

Minton, Henry. A practical homœopathic treatise on the diseases of women and children. 8°. *New York*, 1866.

Miquel, F. A. W. Analecta botanica Indica, commentationes de varies stirpibus Asiæ Australioris. Pars 1-3. Overgedrukt uit Verh. der eerste klasse van het koninklijk-nederlandsche instituut. 3e reeks, 3e-5de deel. 4°. *Amsterdam*, 1850-52.

——— Over de Afrikaansche vijge-boomen. 4°. *Amsterdam*, 1849. pp. 40.

——— Revisio critica casuarinarum. *Illus.* 4°. *Amstelodami*, 1848.

Mirror of the patent office. *See* **American** journal of improvements, etc.

——— of the patent office. *See* **Skinner,** I. L.

Mirus, A. Salzmünde in seiner Wechselwirkung für landwirthschaftliche industrielle und gemeinnützige Zwecke. 16°. *Weimar*, 1863.

——— Ueber die Gewerbe-Ausstellung des Herzogthums Nassau zu Wiesbaden im Juli 1863. 12°. *Wiesbaden*, 1863.

Miscellanea scientifica curiosa. 4°. [1766?] *n. t. p.*

MISSISSIPPI, The river. *See* **River** Mississippi.

——— river, Report on the. *See* **Humphreys,** A. A., and **Abbot,** H. L.

——— valley; its physical geography, topography, botany, climate, geology, etc. *See* **Foster,** J. W.

——— ——— Ancient monuments of the. By E.G. Squier and E. H. Davis. **Smiths'n contrib., v, 1.**

——— ——— Discovery and exploration of. *See* **Shea,** John Gilmary.

Mitchell, Donald G. [*pseud., Ik Marvel*]. My farm of Edgewood; a country book by the author of 'Reveries of a bachelor.' 12°. *New York*, 1866.

——— Rural studies; with hints for country places, by the author of 'My farm at Edgewood.' 12°. *New York*, 1867.

Digitized by Google

Mitchell, John. Manual of practical assaying. *Illus.* 2d ed. 8°. *London*, 1854. **Library of illustrated standard scientific works, v. 11.**

——— Treatise on the falsifications of food, and the chemical means employed to detect them. 12°. *London*, 1848.

Mitchell, S. Augustus. An accompaniment to Mitchell's map of the world, on Mercator's projection; containing an index to the various countries, etc.; also a general description of the five great divisions of the globe. 8°. *Philadelphia*, 1840.

——— An accompaniment to Mitchell's reference and distance map of the United States, containing an index of all the countries, etc., with an index of the rivers; also a general view of the United States, and the several states and territories. 8°. *Philadelphia*, 1839.

——— New general atlas, containing maps of the various countries of the world, plans of cities, etc., with valuable statistical tables. fol. *Philadelphia*, 1866.

Mitchell, S. Weir. Venom of the rattlesnake. **Smiths'n contrib., v. 12.**

Mitchell, Thomas D. Materia medica and therapeutics, with ample illustrations of practice in all the departments of medical science, and very copious notes of toxicology. 8°. *Philadelphia*, 1857.

Mitchell, Walter. Mineralogy and crystallography. *See* **Ansted,** D. T., and others. **Orr's circle of the sciences, v. 4.**

———, **Young,** J. R., and **Imray,** John. Mechanical philosophy; including the properties of matter, elementary statics, dynamics, hydrostatics, hydrodynamics, pneumatics, practical mechanics, and the steam engine. 8°. *London and Glasgow*, 1860. **Orr's circle of the sciences, v. 9.**

Mittheilungen über zweckmässigste Wahl, Bereitung und Verwendung des Düngers. 8°. *Brünn*, 1835.

MITRAILLEUSE. The French mitrailleuse; its construction and service. By W. M. Folger, U. S. N. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Mivart, St. George. On the genesis of species. 12°. *London*, 1871.

Mixer, Horace. The age of discovery; an infallible guide to the business public. 24°. *Chicago*, 1865.

MNEMONICS. Memoria cyclopedia, or the art of memory. *See* **Johnson,** Lorenzo D.

——— Memoria technica. *See* **Grey,** R.

——— Memoria technica. *See* **Johnson,** Lorenzo D.

——— or philosophical memory. *See* **Harris,** Luman H.

——— Système mnémonique, ou art d'aider la mémoire. *See* **Basalé,** Gustave Adolphe.

Mont, Thomas. The short hand standard attempted, by an analysis of the circle as an introductory foundation of a new system of stenography. 8°. *London*, 1833.

MODELING, sculpture, and moulding. *See* **Rondel,** F.

MODENA. Società dei naturalisti in Modena. Annuario, anno 1-3. 8°. *Modena*, 1866-68.

——— Le finanze dei comuni e delle provincie. *See* **Gropelli,** Emilio Serra.

——— Reale accademia di scienze, lettere e d'arti di Modena. Memorie. T. 1-11. [T. 1 in 2 v: pt. 1-2; pt. 3-4.] 4°. *Modena*, 1833-70.

Modenwelt (Die). Illustrirte Zeitung für Toilette und Handarbeiten. Jahrg. 3-6, 1870-73. fol. *Berlin*, 1870-73. [Imperfect.]

MODERN encyclopædia, The. *See* **Burrowes,** Aymas Deane.

——— London; being the history and present state of the British metropolis. 4°. *London*, 1805.

——— philosophy, Course of the history of. *See* **Cousin,** M. Victor.

——— savages. *See* **Lubbock,** John. **Science lectures for the people, series 6.**

Moelling, Edward. Handbook of photography; transl. by. *See* **Vogel,** Hermann.

Mogling, Theodor. Das Neueste im Gebiete der Land- und Forstwirthschaft sowie deren technischen Nebenfächer, 1837-44. 8°. *Reutlingen*, 1846.

Mohn, H. Windrosen des südlichen Norwegens; hrsg. von. *See* **Sene,** C. de.

Mohr, Franz, and **Redwood,** Theophilus. Practical pharmacy; the arrangements, apparatus, and manipulations of the pharmaceutical shop and laboratory. Ed. with additions by William Procter, jr. *Illus.* 8°. *Philadelphia*, 1849.

Digitized by Google

Mohr, Frederick. The grape vine; a scientific treatise on its management. Transl. from the German, with hints on the propagation and general treatment of American varieties, by Horticola. 12°. *New York*, 1867.

—— Der Weinbau, und die Weinbereitungskunde. 8°. *Braunschweig*, 1865.

Mohr, Friedrich. Allgemeine Theorie der Bewegung und Kraft. Als Grundlage der Physik und Chemie. 8°. *Braunschweig*, 1869.

Mohr, John H. Medical guide in treating internal and external diseases of horses, mules, and neat cattle. 24°. *Reading, Pa.*, 1866.

Mohrlin, Fritz. Der schwäbische Bauernfreund. *See* SWABIA.

Moinet, L. Nouveau traité général astronomique et civil d'horlogerie théorique et pratique. T. 1-2. *Illus.* 8°. *Paris, n. d.*

Molard, Claude Pierre. Description des machines et procédés consignés dans les brevets d'invention. T. 1 par. *See* FRANCE. **Ministère** de l'intérieur et d'agriculture.

—— Description d'une machine à battre les grains, inventée par. *See* **M*****, M.

Molard and **Bosc.** Rapport fait à la Société royale et centrale d'agriculture, sur une presse propre à retirer le miel des gâteaux de cire. 8°. [*Paris*, 1823.] *n. t. p.* pp. 6.

MOLE-catching. L'art du taupier: ou méthode amusante et infaillible de prendre les taupes. *See* **Dralet,** M.

MOLECULAR and microscopic science. *See* **Somerville,** Mary.

Moléon, J. G. V. de. Annales de l'industrie nationale et étrangère. *See* **Le Normand,** L. S.

—— Recueil industriel manufacturier, agricole et commercial, de la salubrité publique et des beaux arts. T. 1-3. 8°. *Paris*, 1827-28.

—— Recueil de la Société polytechnique; réd. par. *See* PARIS. **La Société** polytechnique.

Moleschott, Jac. Chemistry of food. *See* **Gore,** G. **Orr's circle of the sciences, v. 7.**

—— Lehre der Nahrungsmittel, für das Volk. 2te Aufl. 12°. *Erlangen*, 1853.

Moll, Louis. Encyclopédie pratique de l'agriculture, publiée par Firmin Didot, frères, fils et cie., sous la direction de. T. 1-8. 8°. *Paris*, 1859.

Möllinger, Karl. Elemente des Rundbogenstiles. Heft 1-7. 2te Aufl. 4°. *München*, 1845-48. pp. 38.

—— Elemente des Spitzbogenstiles. *Illus.* 4°. *München*, 1845-48. pp. 31.

MOLLUSKS, Edible, of Great Britain and Ireland. *See* **Lovell,** M. S.

—— Étude et diagnoses de 144 mollusques kimméridiens inédits, par C. Contejean. *See* MONTBÉLIARD. **Compte-rendu** de la Société d'émulation.

Molyneux, William. Dioptrica nova. A treatise of dioptricks, in two parts; wherein the various effects and appearances of spherick glasses, both convex and concave, single and combined, in telescopes and microscopes, together with their usefulness in many concerns of humane life, are explained. 4°. *London*, 1692.

Monckhoven, D. van. Photographische Optik. Beschreibung der photographischen Objective und der Vergrösserungs-Apparate. Aus dem französischen übersetzt von A. Martin. *Illus.* 8°. *Wien*, 1866.

—— A popular treatise on photography; also a description of, and remarks on the stereoscope and photographic optics, etc. Transl. by W. H. Thornthwaite. *Illus.* 12°. *London*, 1863. **Weale's series, No. 79**.**

—— Procédé nouveau de photographie sur plaques de fer et notice sur les vernis photographiques et le collodion sec. 8°. *Paris*, 1858.

—— Répertoire général de photographie pratique et théorique contenant les procédés sur plaque, sur papier, sur collodion sec et humide, sur albumine, etc. 3e éd. avec atlas. 8°. *Paris*, 1859.

—— Silver sun beam; a text book on sun drawing and photographic printing. *See* **Towler,** J.

—— Traité général de photographie; suivi des applications de cet art aux sciences, et de recherches sur l'action chimique de la lumière. 2e éd. *Illus.* 8°. *Paris*, 1856.

—— Traité populaire de photographie sur collodion. *Illus.* 8°. *Paris*, 1862.

Moncrieff, C. C. Scott. Irrigation in southern Europe: the report of a tour of inspection of the irrigation works of France, Spain and Italy, in 1867-1868, for

Digitized by Google

Moncrieff, C. C. Scott—Continued. the government of India. With appendix. 8°. *London*, 1868.

Mone, Frederick. Treatise on American engineering. Div. A. River-boat engines, by F. Mone; Div. B. Marine engines, by F. Mone; Div. C. Locomotives, by T. Passavant and A. Becher; Div. D. Stationary engines, by A. Becher. *Illus.* 4°. [*New York*, 1854.] *n. t. p.*

MONEY. Definition of the moneys, weights and measures of all countries. *See* **Simmonds,** P. L. **Dictionary** of trade products, etc.

——— of all nations, Weights, measures and. *See* **Clark,** F. W.

——— Measures, weights and moneys of all nations. *See* **Woolhouse,** W. S. B. **Weale's series, No. 101*.**

Monfort, B. R. de. Collection du journal la Lumière; dirigé par. *See* **Collection.**

Monge, Gaspard. An elementary treatise on statics, with a biographical notice of the author. Transl. from the French by Woods Baker. 8°. *Philadelphia*, 1851.

——— Treatise on descriptive geometry; extracted from the French of. *See* **Heather,** J. F.

Moniteur (Le) de la photographie. Revue internationale et universelle des progrès de la photographie. Réd. par. MM. Ernest Lacan et Paul Liesegang. T. 1-14. 4°. *Paris*, 1861-76——.

Monniotte, Jean François. Art du facteur d'orgues par F. Bedos de Celles; attribué à. PARIS. **Acad. roy. des. sc.; arts et métiers, v. 21, 22.**

MONOGRAMS, old architectural ornament and alphabets. *See* **Weale,** John.

——— on pottery and porcelain, etc. *See* **Chaffers,** William.

MONOPOLIES, History of. *See* **Collier,** J. D. **Law** of patents.

Monroe, James. The people, the sovereigns: a comparison of the government of the United States, with those of the republics which have existed before, with the causes of their decadence and fall. By James Monroe, ex-president of the United States. Ed. by Samuel L. Gouverneur. 12°. *Philadelphia*, 1867.

Montagu, Robert. Naval architecture. A treatise on ship building, and the rig of clippers, with suggestions for a new method of laying down vessels. 2d ed. rev. 8°. *London*, 1852.

MONTANA and adjacent territories, Report of the United States survey of; for 1872. *See* UNITED STATES. **Interior dept. Geological survey. F. V. Hayden.**

MONTBÉLIARD. Compte-rendu de la situation et des travaux de la Société d'émulation. [7 Nos., 1854-60, in 2 v., with supplement to 1858. Étude et diagnoses de 144 mollusques kimméridiens inédits, par Ch. Contejean.] 4°. *Montbéliard*, 1854-60.

MONT CENIS. Der Mont-Cenis-Tunnel, seine Erbauung und seine Umgebungen. *See* **Schanz,** Julius.

Monteath, Robert. The forester's guide and profitable planter, containing a practical treatise on planting. 3d ed. 8°. *London*, 1836.

Montgomery, James. The cotton spinner's manual; or a compendium of the principles of cotton spinning. 24°. *Glasgow*, 1850.

——— Lives of literary and scientific men of Italy, Spain and Portugal; ed by. *See* **Shelly,** M. W., and others. **Lardner's cabinet cyclopædia, v. 88-90.**

——— A practical detail of the cotton manufacture of the United States of America and the state of the cotton manufacture of that country contrasted and compared with that of Great Britain; with comparative estimates of the cost of manufacturing in both countries; also a brief historical sketch of the rise and progress of the cotton manufacture in America, and statistical notices of various manufacturing districts in the United States. 8°. *Glasgow*, 1840.

Monthly microscopical journal. Transactions of the Royal microscopical society, and record of histological research at home and abroad. Ed. by Henry Lawson. v. 1-17, 1869-77. 8°. *London*, 1869-77——.

——— nautical magazine. *See* **United States** nautical magazine.

MONTPELLIER. Académie des sciences et lettres de Montpellier. Mémoires. Mémoire de la section de lettres, T. 3, 1er fasc. Mémoire de la section de médecine, T. 3, 1-2e fasc. Mémoire de la section des sciences, T. 3-7. 4°. *Montpellier*, 1855-71.

MONTREAL, Canada, Preliminary survey for the water supply of. *See* **Keefer,** T. C.

——— Trade and commerce of, 1857. *See* **Wilson,** A.

Digitized by Google

MONUMENTAL brasses, A manual of. *See* **Haines**, Herbert.

MONUMENTS. Die mittelalterlichen Baudenkmäler Niedersachsens. *See* HANNOVER.

——— Musterzeichnungen von Grabsteinen. *See* HESSE-DARMSTADT.

——— Rude stone, in all countries. *See* **Fergusson**, James.

Moon, George Washington. The dean's English: a criticism on the dean of Canterbury's essays on the queen's English. 4th ed. 16°. *New York*, 1865.

Moore, J. G. Patent office and patent laws; a guide to inventors, and a book of reference for judges, lawyers, magistrates and others, with appendices. 12°. *Philadelphia*, 1855.

Moore, Jacob Bailey. Memoirs of American governors. v. 1. 8°. *New York*, 1846.

Moore, N. F. Ancient mineralogy; an inquiry respecting mineral substances mentioned by the ancients. 2d ed. 16°. *New York*, 1859.

Moore, R. The artizans' guide, and everybody's assistant, embracing nearly 4000 new and valuable receipts, tables, etc. 18°. *Montreal*, 1875.

Moore, Ralph. The ventilation of mines. 8°. *Glasgow*, 1859.

Moore, Thomas. The history of Ireland. v. 1-4. 16°. *London*, [1834]. **Lardner's cabinet cyclopædia, v. 15-18.**

Moorhof, Moses v. Militär-Sanität, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

——— and others. Chirurgische Instrumente. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Moormann, John J. The Virginia springs; with their analysis, and some remarks on their character, with a directory for the use of the White Sulphur water, and an account of the diseases to which it is applicable. 12°. *Philadelphia*, 1847. [?]

Moquin-Tandon, A. Éléments de botanique médicale, contenant la description des végétables utiles à la médecine, et des espèces nuisibles à l'homme, vénéneuses ou parasites. 12°. *Paris*, 1866.

MORAL philosophy, Science of. *See* **Mahan**, Asa.

——— science, A system of. *See* **Hickok**, Laurens P.

Morand, Sauveur. Art d'exploiter les mines de charbon de terre. PARIS. **Acad. roy. des sc.; arts et métiers, v. 2-5, also 6, 16, 17, 18.**

Mordecai, Alfred. Artillery for the United States land service as devised and arranged by the ordnance board. *Illus.* Text, 8°; plates, fol. *Washington*, 1849.

——— Military commission to Europe in 1855 and 1856, Report of. 4°. *Washington*, 1860.

——— Report of experiments on gunpowder, made at Washington arsenal in 1843 and 1844. 8°. *Washington*, 1845.

——— Second report of experiments on gunpowder, made at Washington arsenal in 1845, 1847, and 1848. 8°. *Washington*, 1849.

Moreau, Friedrich v. Bericht über den landwirthschaftlichen Theil der Weltausstellung zu Paris im Jahre 1867. 4°. *München*, 1867.

Morewood, Geo. B., & co. Morewood and Roger's patent galvanized tinned iron and plumbic zinc. 12°. *New York*, 1853. pp. 31.

Morfit, Campbell. Arts of tanning, currying and leather-dressing; ed. by. *See* **Julia de Fontenelle, J. S. E., and Malepeyre,** F.

——— Chemistry applied to the manufacture of soap and candles, a thorough exposition of the principles and practice of the trade in all their minutiæ, based upon the most recent discoveries in science and improvements in art. *Illus.* 8°. *Philadelphia*, 1847. New ed., 1856.

——— Encyclopedia of chemistry. *See* **Booth**, J. C.

——— Improvement in the chemical arts. *See* **Booth**, J. C., and **Morfit**, Campbell. **Smiths'n misc. coll., v. 2.**

——— Perfumery; its manufacture and use, with instructions in every branch of the art, and recipes for all the fashionable preparations. From the French of Celnart and other late authorities. 16°. *Philadelphia*, 1847.

——— and **Morfit,** Clarence. Chemical and pharmaceutical manipulations: a manual of the mechanical and chemico-mechanical operations of the laboratory. 2d ed. *Illus.* 8°. *Philadelphia*, 1849. Another ed., 1857.

Digitized by Google

Morgan, Charles E. Electro-physiology and therapeutics; a study of the electrical and other physical phenomena of the muscular and other systems during health and disease, including the phenomena of electrical fishes. roy. 8°. *New York*, 1868.

Morgan, John Edward. Four lectures on elementary physiology delivered in the Carpenter's hall, Manchester, England. Lecture 1. Food and digestion. 2. Digestion, the chyle and the blood. 3. The blood and the circulation. 4. Breathing, and the organs with which we breathe. *See* **Science lectures for the people, series 1.**

Morgan, Lewis H. Degrees of relationship among nations. **Smiths'n misc. coll., v. 2.**

Morgan, Sylvanus. Horologiographia optica: universal and particular, speculative and practical dialling. sm. 4°. *London*, 1652.

Morin. L'art d'élever et de soigner les vers à soie, etc. *See* **Radouan, J. 90 Manuels Roret.**

——— Manuel de l'amidonnier et du vermicellier. *Illus.* 18°. *Paris*, 1830. **108 Manuels Roret.**

——— Manuel théorique et pratique d'hygiène. 18°. *Paris*, 1827. **121* Manuels Roret.**

Morin, Arthur. Mécanique pratique; études sur la ventilation. T. 1, 2, 8°; avec atlas, 4°. *Paris*, 1863.

——— Salubrité des habitations. Manuel pratique du chauffage et de la ventilation. *Illus.* 8°. *Paris*, 1868.

Morin, Arthur Jules. Expériences sur les roues hydrauliques à aubes planes et sur les roues hydrauliques à augets. 4°. *Metz*, 1836.

——— Expériences sur le tirage des voitures, faites en 1837 et 1838. 4°. *Metz*, 1839.

——— Fundamental ideas of mechanics and experimental data. Revised, translated, and reduced to English units of measure by Joseph Bennett. 8°. *New York*, 1860.

Morin, J. Manuel de médecine et de chirurgie; augm. par. *See* **Manuel de médecine. 2 Manuels Roret.**

——— Manuel du bottier et du cordonnier; réd. par. 12°. *Paris*, 1831. **57 Manuels Roret.**

Morland, William Wallace. Diseases of the urinary organs; a compendium of their diagnosis, pathology, and treatment. 8°. *Philadelphia*, 1858.

Morley, Henry. The life of Henry Cornelius Agrippa von Nettesheim, doctor and knight, commonly known as a magician. 2 v. 8°. *London*, 1856.

——— The life of Girolamo Cardano of Milan, physician. 2 v. 8°. *London*, 1854.

——— The life of Bernard Palissy, of Saintes, his labors and discoveries in art and science, with an outline of his philosophical doctrines, and a translation of illustrative selections from his works. 2 v. 16°. *Boston*, 1853.

Mornay, Aristides A. Paddle wheels. *See* **Tredgold, T. Steam engine, 1st series.**

MOROCCO leather. Art de faire le maroquin. Par J. J. de Lalande. PARIS. **Acad. roy. des sc.; arts et métiers, v. 38 and 3.**

——— Handbuch der Saffianfabrikation. *See* **Lindes,** *Prof.*, and **Brautigan,** Carl.

——— Die Saffianfabrikation. *See* **Schmidt, C. H. 213 Neuer Schauplatz der Künste.**

Morrice, Alexander. A treatise on brewing; also instructions for the making of malt; with tables of the net duties of excise on strong and table beer. 5th ed. 8°. *London*, 1815.

Morris, Albert J. T. A treatise on meteorology, the barometer, thermometer, hygrometer, rain-gauge and ozonometer. With brief rules to be observed for their correct use. 12°. *Edinburgh*, 1866.

Morris, Caspar. An essay on the pathology and therapeutics of scarlet fever. roy. 8°. *Philadelphia*, 1858.

——— Lectures on scarlet fever. 8°. *Philadelphia*, 1851.

Morris, Charles D. Introduction to the Greek language: a compendious grammar of Attic Greek: with exercises. 12°. *New York*, 1869.

——— Latin lessons: an easy introduction to the Latin language on the basis of Bullions and Morris's Latin grammar. 16°. *New York*, 1867.

Morris, Chester. Lehmann's chemical physiology; transl. by. *See* **Lehmann, Karl G.**

Morris, John G. Catalogue and synopsis of lepidoptera. **Smiths'n misc. coll., v. 3-4.**

Digitized by Google

Morris, R. The etymology of local names; with a short introduction to the relationship of languages. Teutonic names. 12°. *London, n. d.*

Morris, Richard. Essays on landscape gardening, and on uniting picturesque effect with rural scenery, containing directions for laying out and improving the grounds connected with a country residence. 4°. *London,* 1825.

Morrison, William H. Excavation and embankment tables, applicable to all widths of road bed, and all slopes. Calculated for all depths less than 60 feet. 8°. *Indianapolis,* 1854.

Morse, Jedidiah. The American universal geography; or a view of the present state of the kingdoms, states, and colonies in the known world. To which are added an abridgment of the last census of the United States, a chronological table of remarkable events, an improved list of ancient and modern learned and eminent men, and a copious index to the whole work: accompanied by a new and elegant general atlas of the world. 2 v. 6th ed. 8°. *Boston,* 1812. [Atlas wanting.]

Morse, Samuel Finley Breese. Decision on the application for an extension of his patent. *See* **Thomas,** P. F.

—— Telegraph companion: devoted to the science and art of the Morse American telegraph. *See* **Shaffner,** T. P.

—— Telegraphic apparatus and the processes in telegraphy. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 4.**

Morse, Sidney E. North American atlas. 4°. *New York,* 1843.

—— and **Breese,** Samuel. The cerographic atlas of the United States. fol. *New York,* 1842.

Morsell, James S. Decision in the appeal from the decision of Hon. P. F. Thomas, refusing a patent to Dr. Maynard for his fire arms. *See* **Robbins,** Z. C.

MORTALITY of the United States. *See* UNITED STATES. **Interior** department. Census bureau.

MORTARS. Englisches Receptbuch für Maurer. *See* **Reinnel,** F. **31° Neuer Schauplatz der Künste.**

—— Die Kitt-Kunst. *See* **Thon,** C. F. G. **136 Neuer Schauplatz der Künste.**

MORTARS. Observations on limes, calcareous cements, mortars, etc. *See* **Pasley,** C. W.

—— Treatise on calcareous. *See* **Vicat,** L. J.

—— Treatise on limes, cements, mortars, etc. *See* **Burnell,** G. R. **Weale's series, No. 45.**

Mortillet, Paul de. Éducation des porcs. 16°. *Bruxelles,* 1858.

Mortimer, G. W. The pyrote hnist's companion, or a familiar system of recreative fireworks. 1st Amer. from 2d London ed. 12°. *Philadelphia,* 1852.

—— Pyrotechny; a familar system of recreative fireworks. 2d ed. 12°. *London,* [1824?].

Morton, Samuel George. Types of mankind; illustrated from papers of. *See* **Nott,** J. C., and **Gliddon,** George R.

MOSASAURUS. Mosasaurus and three allied genera. By R. W. Gibbs. **Smiths'n contrib., v. 2.**

Moscow. Société impériale des naturalistes de Moscou. Bulletin. T. 1–8 and 28–53. 8°. *Moscou,* 1829–76 ——.

—— —— Nouveaux mémoires. T. 10–13. 4°. *Moscou,* 1855–60.

Moseley, Benjamin. Treatise on sugar; with miscellaneous medical observations. 2d ed. 8°. *London,* 1800.

Moseley, Henry. Lectures on astronomy, delivered at King's college, London. 3d ed. 12°. *London,* 1850.

—— The mechanical principles of engineering and architecture. *Illus.* 8°. *London,* 1843. Amer. ed. with additions by D. H. Mahan. *New York,* 1856.

—— Theory of the arch. **Weale's theory of bridges, v. 1.**

—— A treatise on hydrostatics and hydrodynamics. 8°. *Cambridge,* 1830.

Moseley, Walter Michael. An essay on archery; describing the practice of that art in all ages and nations. 8°. *Worcester,* 1792.

Mosler, Chr. Die Wasserstrassen in den Vereinigten Staaten von Amerika in ihrer kommerziellen und industriellen Bedeutung. Im Auftrage seiner Excellenz des Herrn Ministers für Handel, Gewerbe und öffentliche Arbeiten verfasst. *Illus.* 1. 8°. *Berlin,* 1877.

MOTHER-OF-PEARL. Das Beizen, Schleifen und Poliren des Holzes, Perlmutter, etc. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

Digitized by Google

Mother's (The) medical adviser on the diseases and management of children, with recipes. 24°. *London*, 1839.

MOTHS, Geometrid; or phalænidæ of the United States. By A. S. Packard. *See* UNITED STATES. **Interior dept. Geological survey. F. V. Hayden. v. 10.**

MOTION, Géométrie appliquée à la transformation du mouvement dans les machines. *See* **Girault**, C.

——— Perpetual. Perpetuum mobile: or search for self-motive power. *See* **Dircks**, Henry.

——— Rotary. Description of the rotascope. *See* **Johnson**, W. R.

——— ——— Un phénomène observé dans le mouvement gyratoire des corps. *See* **Magnus**, G.

——— Treatise on the laws of. *See* **Wylson**, J. **Mechanical** inventor's guide.

MOTORS. Manual of the steam engine and other prime movers. *See* **Rankine**, W. J. M.

——— Motoren. Von J. F. Radinger. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Motschulsky, Victor de. Études entomologiques; réd. par. 4e–7e année. 8°. *Helsingfors*, 1855–58.

Mott, George C. Elementary book. No. 2. 24° *New York*, 1850. pp. 36.

Mott, J. L. Iron works, Illustrated catalogue of. *See* **Illustrated** catalogue of statuary, etc.

Moubray, Bonnington. A treatise on breeding, rearing, and fattening all kinds of poultry, cows, swine, and other domestic animals. Reprinted from the 6th London ed., with abridgments and additions by Thomas G. Fessenden. 18°. *Boston*, 1832.

——— Moubray's treatise on domestic and ornamental poultry; a guide to the history, breeding, rearing, fattening, and management of fowls and pigeons. New ed. Revised and enlarged by L. A. Meall. 12°. *London*, 1854.

MOULDING, Manual of Go hic. *See* **Paley**, F. A.

——— Manuel du mouleur. *See* **Lebrun. 23 Manuels Roret.**

——— Moulder's guide. *See* **Overman**, F.

MOULDINGS. Muster-Zeichnungen von Gesimsen. *See* HESSE-DARMSTADT.

Moule, Thomas. An essay on the Roman villas of the Augustan age, their architectural disposition and enrichments, and on the remains of Roman domestic edifices discovered in Great Britain. 8°. *London*, 1833.

Moule, Thomas—Continued.

Moulton, Ferdinand. Pension and bounty land laws. *See* **Mayo**, R.

Moulton, H. D. W. Negative and positive processes on glass and paper. 18°. *New York*, 1857. pp. 16.

MOUNT AUBURN, Guide through. *See* **Dearborn**, Nathaniel.

MOUTH, Treatise on the diseases of the, etc. *See* **Gariot**, J. B. **American library of dental science, v. 4.**

——— A treatise on the diseases and surgical operations of the mouth and parts adjacent. *See* **Jourdain**, M. **American library of dental science, v. 10.**

Mouthful of bread, The history of a. *See* **Mace**, Jean.

MOVEMENT cure. *See* **Taylor**, George H.

Moxon, Joseph. Mechanick dyalling: teaching any man to draw a true sundial on any given plane, however scituated; only with the help of a straight ruler and a pair of compasses; and without any arithmetical calculation. 3d ed. sm. 4°. *London*, 1697.

——— Mechanick exercises; or the doctrine of handy works. Contents. Smithing, joinery, house carpentry, turning, bricklayer's work. sm. 4°. *London*, 1693–1700. pp. 46.

——— A tutor to astronomy and geography, an easie and speedy way to know the use of both the globes, celestial and terrestrial. 4th ed. sm. 4°. *London*, 1686.

Moyens de soustraire l'exploitation des mines de houille aux chances d'explosion. 8°. *Bruxelles*, 1840.

Mozin, Dominique Joseph. Dictionnaire complet des langues française et allemande, par l'abbé Mozin, MM. Guizot, Biber, Moelder, Courtin, et plusieurs autres collaborateurs. 3e éd. rev. et aug. par A. Peschier. T. 1, 2, B. 3-4. 8°. *Stuttgart et Tubingue*, 1842–46.

MUCK manual for farmers. *See* **Dana**, Samuel L.

Mudd, James. The collodio-albumen process; hints on composition and other papers. 16°. *London*, 1866.

Mudge, E. R., and **Hayes**, John L. Report on wool. *See* UNITED STATES.

Digitized by Google

Mudge and **Hayes**—Continued.
State dept. Reports Paris exp. 1867. v. 6.

——— and **Nourse**, B. F. Report upon cotton. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 6.**

Mudge, Thomas. A description, with the plates of the time-keeper invented by the late Thomas Mudge. To which is prefixed a narrative of the measures taken to give effect to the invention since 1793. 4°. *London*, 1799.

Mueller. Ferdinand. Catalogue of the Victorian exhibition, 1861. *See* **Archer**, W. H.

Muhlenberg, D. Henricus. Descriptio uberior graminum et plantarum, calamariarum Americæ septentrionalis indigenarum et cicurum. 8°. *Philadelphia*, 1817.

Muirhead, James Patrick. The life of James Watt, with selections from his correspondence. *Illus.* 2d ed. 8°. *London*, 1859.

——— The origin and progress of the mechanical inventions of James Watt, illustrated by his correspondence with his friends, and the specifications of his patents. v. 1. Introductory memoir and extracts from correspondence. v. 2. Extracts from correspondence. v. 3. Letters patent, specifications of patents, and appendix. 8°. *London*, 1854.

MULBERRY. L'art de cultiver le mûrier. Par M. Morin. *See* **Radouan**, J. **90 Manuels Roret.**

——— Manuel de la culture du mûrier. *See* **Rédarès**, J. M. M. **Encyclopédie populaire, v. 20.**

Mulder, E. Historisch-kritisch overzigt van de bepalingen der aequivalentgewigten van 13 enkelvovdige ligchamen—zwavel, selenium, tellurium, phosphorus, chloor, kalium, zilver, bromium, iodium, fluorium, silicium, & borium. 8°. *Utrecht*, 1853.

Mulder, Gerardus Johannes. De la bière, sa composition chimique, sa fabrication, son emploi comme boisson. Traduit du hollandais par Aug. Delondre. 12°. *Paris*, 1861.

———Die Chemie der austrocknenden Oele, ihre Bereitung und ihre technische Anwendung in Künsten und Gewerben. 8°. *Berlin*, 1867.

Mulder, Gerardus Johannes. The chemistry of vegetable and animal physiology. Transl. from the Dutch by Dr. Fromberg. Introduction and notes by James F. W. Johnston. 8°. *Edinburgh and London*, 1845–49.

——— The chemistry of wine. Ed. by H. B. Jones. 8°. *London*, 1858.

——— Liebig's question to Mulder tested by morality and science. Transl. by P. F. H. Fromberg. Introduction by J. F. Johnston. 8°. *London*, 1846.

Mulder, L. Historisch-kritisch overzigt van de bepalingen der aequivalent-gewigten van 24 metalen. 8°. *Utrecht*, 1853.

MULE, The. *See* **Riley**, Harney.

——— spinning process, and the machinery employed in it. *See* **Neste**, Kurt.

MULHOUSE. La société industrielle de Mulhouse. Bulletin. T. 19-33. 8°. *Mulhouse*, 1845–65.

Mullaly, John. The laying of the cable or the ocean telegraph: an authentic narrative of the attempt to lay the cable across the entrance to the Gulf of St. Lawrence in 1855, and of the three Atlantic telegraph expeditions of 1857 and 1858: with account of the mechanical and scientific part of the work; biographical sketches of Messrs. Cyrus W. Field, William E. Everett, and others connected with the enterprise. *Illus.* 8°. *New York*, 1858.

——— The milk trade of New York and vicinity: an account of the sale of pure and adulterated milk; the daily and yearly consumption and the amount of property invested in the business. Introduction by R. T. Trall. 12°. *New York*, 1853.

Müller, Carl Eduard. Practisches Handbuch des Ackerbaus, vorzugsweise für die Ostseeländer Ruszlands. 8°. *Reval*, 1859.

Müller, F. Max. Chips from a German workshop: essays on literature, biography and antiquities. 3 v. 8°. *New York*, 1869–71.

——— Lectures on the science of language. 1st and 2d series. 8°. *New York*, 1862–65.

Muller, J. Principles of physics and meteorology. 1st Amer. ed. roy. 8°. *Philadelphia*, 1848.

Digitized by Google

Müller, Johannes. Ueber Müller und sein Verhältniss zum jetzigen Standpunkt der Physiologie. *See* **Bischoff**, T. L. W.

—— Lehrbuch der Physik und Meteorologie; bearbeitet von. *See* **Pouillet**, C. S. M.

Müller, L. Die Fabrikation des Papiers, in Sonderheit des auf der Maschine gefertigten, nebst gründlicher Auseinandersetzung der in ihr vorkommenden chemischen Processe und Anweisung zur Prüfung der angewandten Materialien. 4te Aufl. *Illus.* 8°. *Berlin*, 1877. [2te Aufl., 1855. 3te Aufl., 1862.]

Müller, P. Handbuch für Bierbrauer, eine wissenschaftlich-praktische Anleitung zum Bierbrauen im ganzen Umfange des Gewerbes. Mit einem Vorwort von Dr. Fr. Jul. Otto. 8°. *Braunschweig*, 1854.

Müller, Paul. Encyklopädie der Landwirthschaft; bearb. von. *See* **Schnee**, G. H.

MULTIPLICATION and division, New methods for. *See* **Hinkley**, Edward.

MUMMY, Account of an Egyptian. *See* **Osburn**, William.

MUNICH. Akademie der Wissenschaften. Almanach der königlich bayerischen. 8°. *München*, 1855, 1859.

—— —— Der Antheil der königlich bayerischen, an der Entwickelung der Electricitätslehre von W. Beets. 4°. *München*, 1873. pp. 31.

—— —— Antheil der Pharmacie an der Entwickelung der Chemie. *See* **Buchner**, L. A., *jr.*

—— —— Begriff der bürgerlichen Gesellschaft. *See* **Riehl**, W. H.

—— —— Begriff und Stellung des Gelehrten. *See* **Thiersch**, F. von.

—— —— Beurtheilung hygrometrischer Methoden. *See* **Vogel**, A.

—— —— Bildungsgesetze eines Kettenbruches. *See* **Seidel**, L.

—— —— Bleysesquiphosphat. *See* **Vogel**, A., and **Reischauer**, G. C.

—— —— Bulletin. Jahrg. 1847-53. 4°. *München*, 1847-53.

—— —— Die Chemie in ihrem Verhältnisse zur Physiologie und Pathologie. *See* **Pettenkofer**, M.

—— —— Chemische Berührungswirkungen. *See* **Schoenbein**, C. F.

—— —— Der Chemismus der Vegetation. *See* **Vogel**, A.

MUNICH. Akademie der Wissenschaften. Denkrede auf Fuchs. *See* **Kobell**, F. von.

—— —— Denkrede auf Humboldt. *See* **Martius**, C F. P. von.

—— —— Denkrede auf Schubert. *See* **Wagner**, A.

—— —— Denkrede auf Dr. Siber und Dr. Ohm. *See* **Lamont**, J.

—— —— Erinnerung an Mitglieder der mathematisch-physikalischen Classe. *See* **Martius**, C. F. P. v.

—— —— Die fossilen Fische aus den lithographischen Schiefern Bayerns. *See* **Wagner**, A.

—— —— Die fossilen Säugthier-Ueberreste von Pikermi. *See* **Wagner**, A.

—— —— Gedächtniss an Biot. *See* **Martius**, C. F. P. v.

—— —— Gedächtnissrede auf Tiedemann. *See* **Bischoff**, T. L. W.

—— —— Gelehrte Anzeigen. B. 38-50. 4°. *München*, 1854-60.

—— —— Die Gliederung der Bevölkerung des Königreichs Bayern. *See* **Hermann**, F. B. W. v.

—— —— Grenzen und Grenzgebiete der physiologischen Forschung. *See* **Harless**, E.

—— —— Johannes Müller und sein Verhältniss zum jetzigen Standpunkt der Physiologie. *See* **Bischoff**, T. L. W.

—— —— Die Kenntniss der Ostracoden. *See* **Fischer**, S.

—— —— Kenntniss des Sauerstoffes. *See* **Schoenbein**, C. F.

—— —— König Maximilian II. und die Wissenschaft. *See* **Döllinger**, I. v.

—— —— Königliche Massnahmen für das Gedeihen der Wissenschaften. *See* **Thiersch**, F. v.

—— —— Lehre vom Mienenspiel. *See* **Harless**, E.

—— —— Lichtstärke der Planeten Venus, Mars, Jupiter und Saturn. *See* **Seidel**, L.

—— —— Maassbestimmung der Polarisation durch das physiologische Rheoscop. *See* **Harless**, E.

—— —— Mechanik der Muskelzuckung. *See* **Harless**, E.

—— —— Meteorologische Untersuchungen. *See* **Lamont**, J.

—— —— Mittheilungen über metallische Superoxyde. *See* **Schoenbein**, C. F.

—— —— Molekuläre Vorgänge in der Nervensubstanz. *See* **Harless**, E.

Digitized by Google

MUNICH. Akademie der Wissenschaften. De mutationibus quae contingunt in spectro solari fixo. *See* **Zantedeschi**, F.

——— ——— Die oxalsauren Salze. *See* **Vogel**, A.

——— ——— Photometrische Messungen an Fixsterne. *See* **Seidel**, L.

——— ——— Physik der Moleculärkräfte. *See* **Jolly**, P.

——— ——— Rede zur Feier des 104ten Stiftungstages. *See* **Liebig**, J. von.

——— ——— Sitzungsberichte. Jahrg. 1860–73. [2 Bde. each year.] 8°. *München*, 1860–73.

——— ——— Spontane Bläuung einiger Pilze. *See* **Schoenbein**, C. F.

——— ——— Die statischen Momente der menschlichen Gliedmassen. *See* **Harless**, E.

——— ——— Stellung und Bedeutung der pathologischen Anatomie. *See* **Bühl**, L.

——— ——— Stellung Venedigs in der Weltgeschichte. *See* **Thomas**, G. M.

——— ——— Theorie des Seitendruckspirometers. *See* **Harless**, E.

——— ——— Ueber einen neuen Respirations-Apparat. *See* **Pettenkofer**, M.

——— ——— Ueber Parthenogenesis. *See* **Siebold**, C. T. E. von.

——— ——— Die urweltliche Fauna des lithographischen Schiefers. *See* **Wagner**, A.

——— ——— Verdauungswerkzeuge der Saurier. *See* **Rathke**, H.

——— ——— Das Verhalten des Bittermandelöles zum Sauerstoffe. *See* **Schoenbein**, C. F.

——— ——— Die Zersetzungen salpetersaurer Salze durch Kohle. *See* **Vogel**, A.

——— Bericht der Beurtheilungs-Commission bei der allgemeinen deutschen Industrie-Ausstellung zu München im Jahre 1854. 8°. *München*, 1855.

——— Beschreibender Katalog der württembergischen Erzeugnisse in der allgemeinen deutschen Industrie-Ausstellung zu München. 8°. *Stuttgart*, 1854.

——— Codices manuscripti bibliothecae regiae Monacensis: Gallici, Hispanici, Italici, Anglici, Suecici, Danici, Slavici, Esthnici, Hungarici, descripti. Edidit G. M. Thomas. 4°. *Monachii*, 1858.

——— Landwirthschaftlicher Verein in Bayern. Centralblatt. 13 Bde. 8°. *München*, 1843–68.

MUNICH, Landwirthschaftlecher Verein in Bayern. Haus- und Landwirthschafts-Kalender. 19 Bde. 4°. *München*, 1850–69.

——— ——— Die Landwirthschaft in Bayern. Denkschrift zur Feier des fünfzigjährigen Bestandes. 8°. *München*, 1860.

——— ——— Repertorium oder systematisch geordneter Realindex für die ersten 25 Jahrgänge des Wochenblattes. 8°. *München*, 1840.

——— ——— Sach-Catalog der Bibliothek. 8°. *München*, 1849.

——— ——— Zeitschrift. Jahrg. 1–41, 1811–51; 44–50, 1854–60. *München*, 1811–60.

——— Polytechnischer Verein. Kunst- und Gewerbe-Blatt. Jahrg. 1–8, Anzeiger für Kunst- und Gewerbfleiss, 1815–22; Jahrg. 9–54, B. 1–46, Kunst- und Gewerbe-Blatt. 4°. *München*, 1815–68. [Succeeded by Bayerisches Industrie- und Gewerbe-Blatt.]

——— ——— Real-Index zum Kunst- und Gewerbe-Blatt. Jahrgang 1815 bis einschliesslich 1846. Zusammengestellt von Friedrich Alwens. 4°. *München*, 1847.

MUNITIONS of war exhibited at Paris, 1867. By C. B. Norton and W. J. Valentine. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Munnich, J. Tijdschrift voor Indische taal-, land- en volkenkunde; onder redactie van. *See* BATAVIA.

Munsell, Joel. A chronology of paper and paper making. 8°. *Albany*, 1857.

Munson, James E. The complete phonographer, an inductive exposition of phonography. 12°. *New York*, 1867.

MÜNSTER. Landwirthsch. Provinzial-Verein für Westfalen und Lippe. Landwirthschaftliche Zeitung für Westfalen und Lippe 4°. *Münster*, 1866.

Murchison, Roderick Impey. Siluria; the history of the oldest fossiliferous rocks and their foundations, with a brief sketch of the distribution of gold over the earth. 3d ed., including the silurian system. 8°. *London*, 1859.

Murphey, James. Creation; or the Bible and geology consistent, together with the moral design of the Mosaic history. 12°. *New York*, 1850.

Murphy, James Cavanah. The Arabian antiquities of Spain. Atlas, l. fol. 100 engravings, chiefly by Fittler and Landseer. *London*, 1813–16.

Digitized by Google

Murphy, John. A treatise on the art of weaving, with calculations and tables. *Illus.* 3d ed. 8°. *Glasgow*, 1833.

Murphy, John M'Leod, and **Jeffers,** W. N., *jun.* Nautical routine and stowage. With short rules in navigation. 8°. *New York*, 1849.

Murray, *Prof.* Practical farming. *See* **Pringle,** R. O.

Murray, Andrew. The theory and practice of ship-building: with portions of a treatise on naval architecture, by A. F. B. Creuze; steamships, by Robert Murray. 4°. *Edinburgh*, 1861.

Murray, Hugh. The encyclopædia of geography: comprising a complete description of the earth, physical, statistical, civil, and political; exhibiting its relation to the heavenly bodies, its physical structure, the natural history of each country, and the industry, commerce, political institutions, and civil and social state of all nations. Assisted in astronomy, etc., by Prof. Wallace; in geology, etc., by Prof. Jameson; in botany, etc., by Prof. Hooker; in zoology, etc., by W. Swainson. Illus. by maps and engravings, with new map of the United States. Rev. with additions, by Thomas G. Bradford. 3 v. 8°. *Philadelphia*, 1846.

Murray, John. Manuel de l'électricité atmosphérique, comprenant les instructions pour établir les paratonnerres et les paragrêles. Traduit de l'anglais et augmenté par M. Anatole Riffault. 18°. *Paris*, 1831. **92 Manuels Roret.**

——— A treatise on atmospherical electricity, including lightning rods and paragrêles. 12°. *London*, 1830.

——— Wet dock and other works at Sunderland. **Weale's papers on engineering, v. 5.**

Murray, Robert. Rudimentary treatise on marine engines and steam vessels, with remarks on the screw and propelling power as used in the royal and merchant navy. 12°. *London*, 1852. **Weale's series, Nos. 80, 81.**

——— Steamships. *See* **Murray,** A. Shipbuilding.

MUSCLE and nerve fibre. Versuche über die gereizte Muskel- und Nervenfaser, etc. *See* **Humboldt,** Friedr. Alexander v.

MUSCLES. Muskel- und Nervenphysik. *See* **Du Bois-Reymond,** Emil.

MUSCLES. Zur inneren Mechanik der Muskelzuckung. *See* **Harless,** E.

Museum, and repository of arts, American. *See* **American museum.**

——— des Neuesten und Wissenswürdigsten aus dem Gebiete der Naturwissenschaft, der Künste, der Fabriken, der Manufakturen, etc. *See* **Hermbstadt,** Sigismund Friedrich.

——— National, Bulletin of the. *See* UNITED STATES. **Interior department.**

——— of industry. Bulletin du musée de l'industrie. *See* BRUSSELS.

——— Salford borough royal museum and library. Report. *See* SALFORD.

——— Schoepflini. 1. Lapidarium. 2. Marmorarium. 3. Vasarium. Recenset Jer. Jac. Oberlin. 4°. *Argentorati*, [*Strasbourg,*] 1770.

——— South Kensington. Catalogue of the educational division. *See* **South Kensington museum.**

MUSEUMS of art industry. Museen für Kunstgewerbe. Von Carl T. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 22.**

Mushet, David. Papers on iron and steel: a series of original communications made to the Philosophical magazine. 8°. *London*, 1840.

MUSHROOMS and toadstools, How to distinguish. *See* **Smith,** Worthington G.

——— Mycologia Europaea. *See* **Persoon,** C. H.

——— Traité sur les champignons comestibles, contenant l'indication des espèces nuisibles. *See* **Persoon,** C. H.

MUSIC and musical instruments. **Abridgments English Patents, No. 26.**

——— Arts and sciences of the antients. *See* **Rollin,** Charles.

——— Calendario histórico musical para 1873. *See* **Soriano Fuertes,** Mariano de.

——— A complete dictionary of. *See* **Rousseau,** Jean Jacques.

——— in Germany, the Netherlands, etc., The present state of. *See* **Burney,** Charles.

——— Jousse's catechism of. *See* **Brown,** O. B.

——— Das Luftresonanzwerk an Tasten-Instrumenten. *See* **Zachariä,** Eduard.

——— Manuel de musique. *See* **Choron,** A. E., and **Lafage,** J. A. de. **68 Manuels Roret.**

——— Musik und musikalische Instrumente. *See* **Zamminer,** F.

Digitized by Google

MUSIC, Rudiments of. *See* **Trastour, Eugene.**

——— Die Violine, ihre Geschichte und ihr Bau. *See* **Abele, Hyacinth.**

MUSICAL composition, Theory of. *See* **Weber, Godfrey.**

——— instruction. Musikalische Lehrmittel und das musikalische Erziehungs- und Bildungswesen. Von Prof. Weinwurm. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— instruments. *See* **Engel, Carl. South Kensington art and science handbooks, No. 5.**

——— ——— Magazin musikalischer Tonwerkzeuge. *See* **Welcker von Gontershausen, N.**

——— ——— Musikalische Instrumente. Von Eduard Schelle. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 15.**

——— ——— Report on. By P. Stevens. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

——— ——— Treatise on the violin and all other bow instruments. *See* **Otto, J. A.**

——— manual, Key to Wilhem's. *See* **Perrot, A.**

——— notation. Mélographie ou nouvelle notation musicale. *See* **Adorno, Juan Nepomuceno.**

——— terms, Dictionary of. *See* **Adams, John S.**

——— ——— Complete dictionary of. *See* **Hamilton, J. A.**

MUSKETRY, System of. *See* **Busk, Hans.** Handbook for Hythe.

Muspratt, James Sheridan. Chemistry, theoretical, practical, and analytical, as applied and relating to the arts and manufactures. 2. v. roy. 8°. *London, Glasgow, Edinburgh*, 1854-60. Another ed., [1859?]

——— The use of the blowpipe in the examination of minerals, ores, furnace products, and other metallic combinations. *See* **Plattner, Karl Friedrich.**

MUSTARD. Handbuch der Senfbereitung. *See* **Julia de Fontenelle, J. S. E. 33 Neuer Schauplatz der Künste.**

Musterkarte von Gussgegenständen die auf der hochfürstlich Fürstenberg'schen Eisengiesserei zu Neujoachimsthal in Böhmen erzeugt werden. 37 pl. 12°. *n. t. p.*

Musterzeichnungen für Zimmermaler und Lackirer. *Illus.* 4°. *Darmstadt*, 1846.

Muzzi, Muzio. Opinions of thirty-two scientific gentlemen on the invention of Muzio Muzzi; in English and Italian. 8°. [*New York,*] 1845. pp. 14.

Myddelton, A life of. *See* **Smiles, Samuel. Lives** of the engineers, v. 1.

Myer, Albert J. A manual of signals, for the use of signal officers in the field, and for military and naval students, military schools, etc. New ed. 12°. *New York*, 1866.

Myers, Oscar. Tables of gold equivalents in currency. 32°. *New York*, 1867.

MYSTERIES of nature and art. *See* **Bate, John.**

MYTHOLOGY. Manuel de mythologie. *See* **Dubois, N. A. 16 Manuels Roret.**

——— Vala: a mythological tale. *See* **Godwin, Parke.**

Nagel, Ignaz, **Berg**, Conrad, and **Exner**, Wilhelm F. Schreib- etc. Requisiten. Buchbinderei, etc. Tapeten, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

NAIL trade, The British. *See* **Vanes, Benjamin.**

NAILS. Abridgments English Patents, No. 58.

NAMES. Etymological dictionary of family and Christian names. *See* **Arthur, William.**

——— The etymology of local. *See* **Morris, R.**

Naphegyi, G. The album of language, illustrated by the Lord's Prayer in one hundred languages. With historical descriptions of the principal languages. fol. *Philadelphia*, 1869.

Napheys, George H. Modern therapeutics: a compendium of recent formulæ, and specific therapeutical directions. 16°. *Philadelphia*, 1870.

——— and **Brinton**, D. G. Personal beauty: how to cultivate and preserve it, in accordance with the laws of health. 16°. *Springfield, Mass.*, 1870. [†]

Napier, James. A manual of dyeing receipts, with samples of dyed cloth and silk. 12°. *London*, 1855. Later ed., 1875.

——— A manual of electro-metallurgy; including the applications of the art to manufacturing processes. *Illus.* 12°. *Philadelphia*, 1853. Later eds., 1857, 1876.

——— A manual of the art of dyeing. *Illus.* 12°. *Glasgow*, 1853.

Digitized by Google

Napier, James. Manufacturing arts in ancient times, with special reference to Bible history. 12°. *London*, 1874.

——— A system of chemistry applied to dyeing. A new ed. by A. A. Fesquet, with an appendix on dyeing and calico printing. 8°. *Philadelphia*, 1869.

Napoléon, *Prince.* Rapport sur l'exposition universelle de 1855. Présenté à l'empereur par le. 4°. *Paris*, 1857.

Nash, E. The farmer's practical horse farriery: containing rules for buying, breeding, breaking, lameness, vicious habits, management, prevention, symptoms, treatment, and cure of diseases, etc. To which is added an account of the breeds in the United States. 12°. *Auburn*, 1858.

Nash, James Addison. Southern family physician, or the electic practice of medicine. Pt. 1. Useful preliminaries. Pt. 2. Diagnosis and practice. Pt. 3. Obstetricks. Pt. 4. Materia medica and dispensatory. roy. 8°. *New Orleans*, 1853.

NASHVILLE. Report of the committee of the city council, upon the affairs of the Nashville and Northwestern railroad company. 8°. *n. t. p.* pp. 16.

Nasmyth, Alexander. Researches on the development, structure, and diseases of the teeth. 8°. *Baltimore*, 1842. **American library of dental science, v. 4.**

Nasmyth, James. Remarks on tools and machines, by. *See* **Baker,** Thomas. Elements of mechanism. **Weale's series, Nos. 98, 98*.**

NASSAU. Gewerbe-Verein des Herzogthums Nassau. Mittheilungen. Hrsg. von W. Casselmann und E. Winter. Jahrg. 5–12; 23–30. 8°. *Wiesbaden*, 1851–76———.

——— Medicinische Jahrbücher für das Herzogthum Nassau. [Heft 1–6, 9–18, bound in 10 v. Heft 1–6 ed. by J. B. v. Franque, W. Fritze, and P. Thewalt. Heft 9–14 ed. by J. B. v. Franque, W. Fritze, and C. Vogler.] 8°. *Wiesbaden*, 1843–60.

——— Naturhistorischer Verein in Nassau. Jahres-Bericht. Jahre 1863–64, 1869–70. 8°. *Nassau*, 1865–71.

——— Verein für Naturkunde im Herzogthum Nassau. Jahrbücher. Heft 3–28. [Heft 3–5 ed. by C. Thoma; 6–9, by F. Sandberger; 10–16, by C. L. Kirschbaum.] 8°. *Wiesbaden*, 1846–74.

National academy of sciences. Annual for 1863–65. 12°. *Cambridge*, 1865.

National academy of sciences. Report for 1863. 8°. *Washington*, 1864.

——— (The) almanac and annual record. For the years 1863 and 1864. 12°. *Philadelphia*, 1863, 1864.

——— cook-book. By a lady of Philadelphia, author of the 'Family save-all.' 16°. *Philadelphia*, 1850.

——— economy. Nationalökonomie oder Volkswirthschaftslehre. *See* **Schulze,** Friedrich Gottlob.

——— museum, United States. Bulletins. *See* UNITED STATES. **Interior** department.

NATURAL history. *See, also,* **Botany, Zoology,** etc.

——— ——— *See* **Smiths'n misc. coll., v. 1–4.**

——— ——— Abhandlungen der naturforschenden Gesellschaft. *See* GÖRLITZ.

——— ——— The American naturalist. *See* **American** naturalist.

——— ——— Anales de la universidad de Chile. *See* SANTIAGO.

——— ——— Bericht des naturhistorischen Vereins in Augsburg. *See* AUGSBURG.

——— ——— Bulletins of the United States national museum. *See* UNITED STATES. **Interior** department.

——— ——— Collecting specimens of. **Smiths'n misc. coll., v. 2.**

——— ——— Dictionary of terms. *See* **McNicoll,** D. H.

——— ——— First lesson in. *See* **Agassiz,** *Mrs.* Elizabeth.

——— ——— Der gelehrte Spielkamerad oder der kleine Naturforscher, etc. *See* **Wagner,** Hermann.

——— ——— Hand books of the Crystal palace. *See* **Crystal** palace.

——— ——— Jahrbuch des naturhistorischen Landesmuseums von Kärnten. *See* KLAGENFURT.

——— ——— Jahrbücher des Vereines für Naturkunde. *See* NASSAU.

——— ——— The journal of a naturalist. *See* **Journal.**

——— ——— Man's place in nature. *See* **Huxley,** T. H.

——— ——— Manual of the practical naturalist. *See* **Manual.**

——— ——— Manuel du naturaliste préparateur. *See* **Boitard,** Pierre. **17 Manuels Roret.**

——— ——— Die Menagerie. *See* **Menagerie.**

Digitized by Google

NATURAL history. The naturalist in Vancouver's island and Bri ish Columbia. *See* **Lord**, John Keast.

——— ——— Naturgeschichtliche Lehrmittel. Von A. Pokorny. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— ——— Der naturgeschichtliche Unterricht. *See* **Rossmässler**, E. A.

——— ——— of birds. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 115, 116.**

——— ——— of fishes, amphibians and reptiles. *See* **Swainson**, William. **Lardner's cabinet cyclopædia, v. 117, 118.**

——— ——— of man, Th› theories of a. *See* **Van Amringe**, William F.

——— ——— of New York. Flora. *See* NEW YORK. **Geol. survey.**

——— ——— of Pliny. *See* **Plinius** Secundus, C.

——— ——— of quadrupeds. *See* **Swainson**, William. **Lardner's cabinet cyclopædia, v. 113.**

——— ——— of the countries visited during the voyage of the Beagle. *See* **Darwin**, Charles

——— ——— of the human species. *See* **Smith**, Charles Hamilton.

——— ——— Om de i Norge forekommende fossile dyrelevninger fra qvartaerperi›den. *See* **Sars**, Michael.

——— ——— Physical atlas. *See* **Johnston**, A. K.

——— ——— Report of the regents of the university of New York, on the state cabinet. *See* NEW YORK (state).

——— (The) history review; a quarterly journal of biological science. Ed. by G. Busk, W. B. Carpenter, F. Currey, J. R. Greene, T. H. Huxley, J. Lubbock, R. McDonnell, D. Oliver, P. L. Sclater, W. Thomson, and E. P. Wright. v. 1–5. 8°. *London*, 1861–65.

——— ——— Schriften der naturforschenden Gesellschaft. *See* DANZIG.

——— ——— Study of. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 111.**

——— ——— Transactions of the Plymouth ins itution and Devon and Cornwall natural history society. *See* PLYMOUTH.

——— ——— Verhandlungen des naturhistorischen Vereins. *See* DESSAU.

——— ——— Verhandlungen des naturhistorischen Vereins. *See* **Prussian** Rhenish provinces.

NATURAL magic. *See* **Brewster**, David.

——— philosophy. *See* **Quackenbos**, G. P.

——— ——— and astronomy, Handbooks of. *See* **Lardner**, Dionysius.

——— ——— chemistry and the arts, Journal of. *See* **Nicholson**, William.

——— ——— Elementary treatise on. *See* **Deschanel**, A. Privat.

——— ——— Elementi di fisica sperimentale e di meteorologia. *See* **Pouillet**, Claude S. M.

——— ——— Elements of. *See* **Bird**, G., and **Brooke**, C.

——— ——— Elements of. *See* **Chambers**, William and Robert.

——— ——— Elements of. *See* **Hogg**, Jabez.

——— ——— Handbook of. *See* **Higgins**, W. M.

——— ——— Introduction to. *See* **Imison**, J.

——— ——— Introduction to. *See* **Olmsted**, D.

——— ——— Introduction to. By Mrs. J. Marcet. *See* LONDON. **Society of useful knowledge, v. 2.**

——— ——— Introduction to the study of. *See* **Tomlinson**, C. **Weale's series, No. 2.**

——— ——— Lectures on. *See* **Young**, T.

——— ——— Miscellaneous papers of J. Smeaton. *See* **Smeaton**, J.

——— ——— Natural and chemical philosophy. *See* **Leslie**, John.

——— ——— Die Naturlehre. *See* **Baumgartner**, A.

——— ——— on mechanical principles. *See* **Pasley**, T. H.

——— ——— Principles of. *See* **Millington**, J.

——— ——— Study of. *See* **Herschel**, J. F. W. **Lardner's cabinet cyclopædia, v. 98.**

——— ——— System of. *See* **Rowning**, J.

——— ——— Treatise on. *See* **Thomson**, William, and **Tait**, Peter Guthrie.

——— sciences. Abhandlungen des ungarischen naturwissenschaftlichen Vereins. *See* PESTH.

——— ——— Bericht der oberhessischen Gesellschaft für Naturkunde. *See* GIESSEN.

——— ——— Bericht des Offenbacher Vereins für Naturkunde. *See* OFFENBACH.

——— ——— Correspondenzblatt des naturforschenden Vereins. *See* RIGA.

Digitized by Google

NATURAL sciences. Dictionnaire des sciences naturelles. *See* **Dictionnaire.**

——— ——— Dictionnaire des termes usités dans les sciences naturelles. *See* **Jourdan, A. J. L.**

——— ——— Geschichte der Naturwissenschaften. *See* **Liebig,** J. von.

——— ——— Jahresbericht der naturforschenden Gesellschaft. *See* EMDEN.

——— ——— Jahresbericht des Vereins für Naturkunde. *See* MANNHEIM.

——— ——— Mittheilungen der naturforschenden Gesellschaft. *See* BERN.

——— ——— Schriften der Gesellschaft zur Beförderung der Naturwissenschaften. *See* MARBURG.

——— ——— A short history of natural science. *See* **Buckley,** Arabella B.

——— ——— Természettudományi társulat évkönyvei. *See* PESTH.

——— ——— Természettudományi társulat közlönye. *See* PESTH.

——— ——— Thätigkeit der St. Gallischen naturwissenschaftlichen Gesellschaft. *See* ST. GALLEN.

——— ——— Verhandlungen der schweizerischen naturforschenden Gesellschaft. *See* SWITZERLAND.

——— ——— Zeitschrift für die gesammten naturwissenschaften. *See* HALLE.

——— selection, The action of, on man. *See* **Wallace,** A. Russel. **University series, No. 6.**

NATURALIST, The American. *See* **American** naturalist.

——— (The) in Vancouver's island and British Columbia. *See* **Lord,** John Keast.

——— The journal of a. *See* **Journal.**

——— Manual of the practical. *See* **Manual.**

NATURALIZATION laws of the United States. *See* **Bromwell,** W. J. History of immigration.

Nature. A weekly illustrated journal of science. v. 1–15. 4°. *London,* 1869–77——

——— and art. v. 1, 2 [bound in 1 v.] 8°. *London,* 1866.

——— The book of. *See* **Good,** John Mason.

——— The book of. *See* **Schoedler,** Friedrich.

——— The forces of. *See* **Guillemin,** Amédée.

——— Das Grosse und Schöne in der Natur. *See* **Sander,** Heinrich.

——— in disease. *See* **Bigelow,** Jacob.

NATURE, Philosophy of the mechanics of. *See* **Allen,** Z.

——— The physical phenomena of. *See* **Hunt,** R. Poetry of science.

——— printing. Die Entdeckung des Natur-Selbstdruckes. *See* **Auer,** A.

——— ——— its origin and objects. *See* **Bradbury,** H.

——— ——— Natur-selbst-Druck: seinen Ursprung und Zwecken [*sic*]. *See* **Bradbury,** H.

Naturhistorische und chemisch-technische Notizen nach den neuesten Erfahrungen zur Nutzanwendung für Gewerbe, Fabrikwesen und Landwirthschaft. 1ste bis 15te Sammlung, 1854–63. 15 Bde. 12°. *Berlin,* 1854–63.

Naturwissenschaftlicher Verein für Sachsen und Thüringen in Halle. Zeitschrift für die gesammten Naturwissenschaften. Red. von C. Giebel und W. Heintz. Jahrg. 1854–75, B. 4–46. [B. 35 begins 'neue Folge', entitled, in place of the name of the society, 'Originalabhandlungen und monatliches Repertorium der Literatur der Astronomie, Meteorologie, Physik, Chemie, Geologie, Oryktognosie, Palaeontologie, Botanik und Zoologie. Red. von C. G. Giebel und M. Siewert.' From B. 3, C. G. Giebel alone.] 8°. *Berlin,* 1854–75.

Naumann, Carl Friedrich. Elemente der Mineralogie. 8°. *Leipzig,* 1852.

NAUTICAL and commercial pocket dictionary in eight languages. *See* **Henckel,** C., and **Born,** F.

——— dictionary. *See* **Young,** Arthur.

——— ——— Allgemeines Wörterbuch der Marine. *See* **Röding,** Johann Heinrich.

——— ——— The sailor's word book. *See* **Smyth,** W. H.

——— routine and stowage. *See* **Murphy,** John McLeod, and **Jeffers,** W. N., *jr.*

——— science. Manuel de marine. *See* **Verdier. 113* Manuels Roret.**

——— vocabulary. *See* **Fincham,** John.

NAVAL architecture and ship building. *See* **Meade,** Richard W.

——— ——— Anleitung zur Schiffbau-Kunst. *See* **Mielichhofer,** C.

——— ——— La construction des vaisseaux. *See* **Vial du Clairbois.**

——— ——— Construction des vaisseaux. Par F. de Chapman. PARIS. **Acad. des sc.; arts et métiers, v. 45.**

——— ——— The form of ships and boats. *See* **Bland,** W. **Weale's series, No. 83 bis.**

Digitized by Google

NAVAL architecture. Iron ship building. *See* **Grantham**, J. **Weale's series, No. 54*.**

——— ——— Method of comparing lines and draughting vessels. *See* **Pook**, Samuel M.

——— ——— Modern system of. *See* **Russell**, J. Scott.

——— ——— Progress of. *See* **Davison**, Darius.

——— ——— Progress of. By Capt. Washington. *See* **Lectures** on the results of the exhibition.

——— ——— Rudiments of. *See* **Peake**, James. **Weale's series, Nos. 51-53.**

——— ——— Science of steam. *See* **Tredgold**, T. **Steam** engine, 1st series.

——— ——— The ship builder's manual. *See* **Griffiths**, J. W.

——— ——— Treatise on. *See* **Griffiths**, J. W.

——— ——— Treatise on. By A. F. B. Creuze. *See* **Murray**, A. Ship building.

——— ——— A treatise on ship building and the rig of clippers. *See* **Montagu**, R.

——— ——— Vocabulary of terms used in. *See* **Vocabulary.**

——— ——— Wood and iron sail ships and steamers. *See* **Beschke**, W.

——— armour. *See* **Chalmers**, James.

——— art and science. Nautical routine and stowage. *See* **Murphy**, J. M'L., and **Jeffers**, W. N., *jr.*

——— art and science. State of the navies of all nations. *See* **Steinitz**, F. The ship.

——— art and science. United States nautical magazine and naval journal. *See* **United** States nautical magazine.

——— brigade. Landing drill at Key West. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— ——— Organization of. By Edward W. Very. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— defences, System of. *See* **Eads**, James B.

——— experimental battery at Annapolis, Md. *See* UNITED STATES. **Navy** department.

——— expositor. *See* **Blanckley**, T. R.

——— ordnance. *See, also*, **Ordnance.**

——— ordnance and gunnery, A text book of. *See* **Cooke**, A P.

——— ordnance papers. No. 1. Gunpowder. No. 2. Electric clepsydra. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— technical dictionary, French and English. *See* **Burn**, R.

NAVAL warfare with steam. *See* **Douglas**, H.

Nave, Johann. A handy-book to the collection and preparation of freshwater and marine algæ, diatoms, desmids, fungi, lichens, mosses, and other of the lower cryptogamia, with instructions for the formation of an herbarium. Transl. by W. W. Spicer. 16°. *London*, 1867.

Navier, —. Architecture hydraulique; éd. par. *See* **Bélidor**, B. F. de.

Navier, M. Résumé des leçons d'analyse données à l'École polytechnique. Notes par M. J. Liouville. T. 1-2. 8°. *Paris*, 1840.

NAVIGATION. American practical navigator. *See* **Bowditch**, Nathaniel.

——— and nautical astronomy. *See* **Coffin**, J. H. C. [†]

——— and nautical astronomy. *See* **Jeans**, H. W. **Weale's series, Nos. 99, 100.**

——— at sea. *See* **Thoms**, William.

——— Commerce and, of the United States, 1839. *See* UNITED STATES. **Treasury** department.

——— Elements of surveying and. *See* **Davies**, C.

——— Fleet of the future, [in 1862.] *See* **Russell**, J. S.

——— improved. *See* **Rowe**, J.

——— Improvement of. *See* **Genevois**, J. A.

——— Instruction in. *See* **Keith**, Thomas.

——— Nautical and hydraulic experiments. *See* **Beaufoy**, M.

——— Osservazioni sulla navigazione. *See* **Ghersi**, G. D.

——— Practical. *See* **Seller**, John.

——— Report from the register of the treasury on the navigation of the United States, June 30, 1851. *See* UNITED STATES. **Treasury** department.

——— Short rules in. *See* **Murphy**, J. McL, and **Jeffers**, W. N., *jr.*

——— Steam in the United States. By J. O. Sargent. **Weale's papers on engineering, v. 3.**

——— Tables of trade and. *See* CANADA.

——— Treatise on. *See* **Greenwood**, J. **Weale's series, Nos. 55, 56.**

——— Treatise on. *See* **Young**, J. R., and others. **Orr's circle of the sciences, v. 5.**

——— Treatise on. By J. Wrottesley. *See* LONDON. **Society of useful knowledge, v. 3.**

NAVY and marine corps, The laws of. *See* UNITED STATES. **Navy** department.

Digitized by Google

NAVY. Dictionary of officers of the navy who have served with the land forces. *See* **Gardner,** C. K. Dictionary of the army.

——— Naval text book and dictionary. *See* **Totten,** B. J.

——— of the United States. *See* **Dickerson,** E. N.

——— of the United States. *See* **Emmons,** George F.

——— Ordnance instructions for the United States navy. *See* UNITED STATES. **Navy** department.

——— Register of officers. *See* UNITED STATES. **Register** of officers.

NEBRASKA, Ancient fauna of. By J. Leidy. **Smiths'n contrib., v. 6.**

——— and portions of the adjacent territories. Report of the United States survey in 1872. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden.**

NECK. Observations on surgical diseases of the head and neck. *See* **Observations.**

Nederlandisch- indische maatschappij van Nijverheid. Tijdschrift voor Nijverheid in Nederlandisch Indie, uitgegeven door, onder Hoofdredaktie van P. Bleeker. D. 1-7. 8°. *Batavia,* 1854-61.

NEEDLE-GUN. Abhandlung über die Zündnadelgewehre. *See* **Dreysse,** Nicolaus.

——— work. Frauen-Arbeiten. Von Helene v. Roditzky. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— ——— Illuminated book of. *See* **Owen,** *Mrs.* H.

——— ——— Instruction in. *See* **Pullan,** M.

——— ——— Ladies' guide to. *See* **Stephens,** *Mrs.* A. S.

NEEDLES. Abridgments English Patents, No. 45.

Neff, Peter, *jr.* Photography on collodion. *See* **Waldack,** C.

NEGATIVE and positive processes, on glass and paper. *See* **Moulton,** H. D. W.

Neidhard, C. Diphtheria, as it prevailed in the United States from 1860 to 1866; preceded by an historical account of its phenomena, its nature, and homeopathic treatment. 8°. *New York,* 1867.

Neighbor, Alfred. The apiary; or bees, bee-hives, and bee culture: the habits of bees, and the most improved methods of management. 8°. *London,* 1865.

Neill, John. Outlines of arteries. 2d ed. roy. 8°. *Philadelphia,* 1852. pp. 28.

——— Outlines of the nerves. 2d ed. roy. 8°. *Philadelphia,* 1852. pp. 27.

——— Outlines of the veins and lymphatics. roy. 8°. *Philadelphia,* 1847. pp. 29.

——— and **Smith,** F. G. An analytical compendium of the various branches of medical science. 2d ed. 12°. *Philadelphia,* 1852.

Neill, Patrick. The fruit, flower and kitchen garden; adapted to the United States, from the 4th [Eng.] ed. 12°. *Philadelphia,* 1851.

——— The practical fruit, flower and vegetable gardener's companion; adapted to the United States, by G. Emerson. 12°. *New York,* 1855.

Neilreich, August. Diagnosen der in Ungarn und Slavonien beobachteten Gefässpflanzen, welche in Koch's Synopsis nicht enthalten sind. 8°. *Wien,* 1867.

——— Nachträge zu Maly's Enumeratio plantarum phanerogamicarum imperii Austriaci universi. Hrsg. von d r k. k. zoologisch-botanischen Gesellschaft in Wien. 8°. *Wien,* 1861.

——— Nachträge zur Flora von Nieder-Österreich. 8°. *Wien,* 1866.

———Die Vegetationsverhältnisse von Croatien. Hrsg. von der k. k. zoologisch-botanischen Gesellschaft in Wien. 8°. *Wien,* 1868.

Nélaton, M. Clinical lectures on surgery. From notes taken by Walter F. Atlee. 8°. *Philadelphia,* 1855.

Neligan, J. Moore. Medicines, their uses and mode of administration; including a complete conspectus of the three British pharmacopœias. 8°. *New York,* 1849.

Nelson, R. Asiatic cholera; its origin and spread in Asia, Africa, and Europe; introduction into America, through Canada: and various modes of treatment analyzed. 12°. *New York,* 1866.

Nelson, Samuel, and **Smalley,** David A. Decisions by Justice Nelson, Judge Smalley sitting with him, in the following sewing machine cases, United States circuit court, southern district of New York: Orlando B. Potter and Nathaniel Wheeler vs. James G. Wilson and Alexander C. Stockmarr. Same vs. George B.

Digitized by Google

Nelson, S., and **Smalley,** D.—Continued. Sloat and others. Same vs. John B. Gibbs. The Grover and Baker sewing machine co. vs. George B. Sloat and others. Same vs. John B. Gibbs. 8°. *New York,* 1860. pp. 16.

Nelthropp, H. L. A treatise on watch work, past and present. 12°. *London,* 1873.

Nemnich, Philipp Andreas. Allgemeines Polyglotten-Lexicon der Natur-Geschichte. Mit erklaerenden Anmerkungen. 8 Bde. 4°. *Hamburg und Halle,* 1793–98.

NEPTUNE, Ephemeris of the planet. By S. C. Walker. **Smiths'n contrib., v. 2 and 3.**

——— The planet. An exposition and history. *See* **Nichol,** J. P.

——— Researches on the planet. By S. C. Walker. **Smiths'n contrib., v. 2.**

Neri, Antonio. The art of glass; wherein are shown the wayes to make and colour glass, pastes, enamels, lakes, and other curiosities. Transl. from the Italian of. 12°. *London,* 1662.

NERVES. Molekuläre Vorgänge in der Nervensubstanz. *See* **Harless,** E.

——— Muskel- und Nervenphysik. *See* **Du Bois-Reymond,** Emil.

——— Outlines of the. *See* **Neill,** John.

NERVOUS system of the rana pipiens, Anatomy of. By J. Wyman. **Smiths'n contrib., v. 5.**

Neste, Kurt. The mule spinning process and machinery employed in it: described with special regard to the spinning of middle fine numbers. 8°. *Manchester,* 1865.

Neszler, J. Der Wein, seine Bestandtheile und seine Behandlung, nebst Anhang über Düngung der Reben und über Untersuchungsmethoden der Weine. 8°. *Chemnitz,* 1865.

NETHERLANDS. *See, also,* HOLLAND.

——— Handelingen der Nederlandsche entomologische vereeniging. 1 Deel. 1ste, 2de, 4te Stuk. 4°. *Te Leiden,* 1854–57.

——— History of the. *See* **Grattan,** T. C. **Lardner's cabinet cyclopædia, v. 55.**

——— Verhandelingen uitgegeven door de commissie belast met het vervaardigen eener geologische beschrijving en kaart van Nederland. Deel 1–2. fol. *Te Haarlem,* 1853–54.

Netscher, E. Tijdschrift voor Indische taal-, land- en volkenkunde. *See* BATAVIA.

NETTING, Lady's assistant in; also in knitting and crotchet work. *See* **Gaugain,** *Mrs.* J.

NEUCHATEL. Bericht der Kommissäre im Kanton Neuenburg an den schweizerischen Bundesrath. *See* SWITZERLAND.

——— Bericht über die Wegen der Insurrektion in Neuenburg Verhafteten. *See* SWITZERLAND.

——— Botschaft in der Neuenburger-Angelegenheit. *See* SWITZERLAND.

——— Message concernant la question neuchâteloise. *See* SWITZERLAND.

——— Rapporto del Dr. Escher per l'affare di. *See* **Escher,** Dr.

——— Rapporto della maggioranza della commissione sulla questione di. *See* SWITZERLAND.

——— Rapports concernant les Neuchâtelois détenus pour cause d'insurrection. *See* SWITZERLAND.

——— La société des sciences naturelles de Neuchâtel. Bulletin. T. 3–6. 8°. *Neuchâtel,* 1853–62.

——— Vortrag des Dr. Escher in der Neuenburger-Frage. *See* **Escher,** *Dr.*

Neuer Schauplatz der Künste und Handwerke, mit Berücksichtigung der neuesten Erfindungen. Herausgegeben von einer Gesellschaft von Künstlern, Technologen und Professionisten. [Plates in most cases bound separately in small 4°.] *Illus.* Verlag und Druck von B. F. Voigt. B. 1–289——. 8°. *Weimar, Augsburg, Ilmenau,* 1824–75——.

1. Der vollkommene Conditor. Recepte zu allen Gattungen der Kunstbäckerei, künstlicher Getränke und Chocoladen. Johann Christian Eupel. 5te Aufl. durch Giacomo Perini. 1840.
2. Kunst Bücher zu binden, Futterale zu machen, Landkarten etc. aufzuziehen. F. G. Thon. 1ster Theil. 4te Aufl. 1844.
3. Optik, Catoptrik und Dioptrik. Bau aller optischen Instrumente. Fr. W. Barfuss. *Illus.* 1839.
4. Kunst des Seifensiedens und Lichtziehens. Anfertigung aller Sorten von Seifen und Talglichtern. Von einem Seifensieder. *Illus.* 1843.
5. Tischlerkunst. Lehrbuch für Bau- und Möbeltischler; die Kenntniss der Werkzeuge und Hölzer; Rathschläge und Recepte. Friedr. Aug. Stöckel. 2te Aufl. von Th. J. Ciliax. Mit Atlas. 1843.
6. Färberei auf Wolle, Seide, Leinen, Hanf und Baumwolle. Anhang über Kattun-Druckerei. J. B. Vitalis. Nach dem Französischen. 5te Aufl. von Ch. H. Schmidt. Mit Atlas. 1847.

Digitized by Google

Neuer Schauplatz—Continued.

7. Bäckerei von Brot, Semmel, Kuchen und Pfefferkuchen. Verfertigung von Nudeln, Oblaten, Honigkuchen; Anweisung Obst zu darren. E. G. Woltersdorf. 1824.
8. Gold- und Silberarbeiter und Juwelier. Darstellung der chemischen und mechanischen Arbeitsoperationen, mit Berücksichtigung der Werkzeuge, Maschinen und Apparate. Anhang über Edelsteine und Perlen. Rudolf v. Kulmer. Mit Atlas. 1872.

   Gold- und Silberarbeiter. Heinrich Schultze. *Illus.* 1846.
9. Kleidermacherkunst. Selbstunterricht in der Lehre der Nähte; Zeichnung der Patronen; Zuschneiden, Zusammensetzung und Bearbeitung; Biegeln und Ausbessern; Flecke auszubringen; Farben herzustellen. Fr. Heyder. *Illus.* 1837.
10. Papier-Tapeten-Fabrikation. Bereitung von satinirten, Iris-, velutirten, vergold- und silberten, gefirnissten und Decorationstapeten. Auch deren Farbestoffe und Aufziehen. Chr. Heinr. Schmidt. Mit Atlas. 2te Aufl. 1848.
11. Schuh- und Stiefelmacher. Anhang über Schuhflickerei, Holzschuhmacherei, Leistenschneiderei, Glanzwichsen. 1824.
12. Fleischerhandwerk. Schlachten; Gewichtschätzung; Kennzeichen des kranken Viehes; Schächten der Juden; Wurstbereitung; Aufbewahrung des Fleisches; Trocknen; Einsalzen; Räuchern; Einsäuern; Einzuckern; und Benutzung der Knochen. G. P. F. Thon. 2te Aufl. von Friedr. A. Reimann. Mit Atlas. 1842.
13. Kochkunst für Feinzüngler und für bürgerliche Haushaltungen. Mit Abbildung von Speisetafeln und Register. Friedr. Wilh. Huth. 2te Aufl. 1838.
14. Lackirkunst. Vollständige Anleitung. F. G. Thon. 1835.
15. Drehkunst in Holz, Horn, Elfenbein, Metall etc. Verzierung, Poliren und Lackiren der Drechslerarbeiten. D. Theod. Thon. 4te Aufl. C. H. Schmidt. Mit Atlas. 1843.
16. Der vollkommene Parfumeur: Pommaden, Puder, Extracte, Tincturen, Essenzen, Oele, Essige, Opiate, Seifen, Räucherkerzchen und Pulver, Bäder, Schminken, etc. Aus dem Französischen. 2te Aufl. Mit Atlas 1848.
17. Indigfabrikation aus Indigofera, Wrightia tinctoria und Polygonum tinctorium. Merkmale, Prüfung und Werth-Bezeichnung der Indigsorten. G. S. Perrottet. Aus dem Französischen von Ch. H. Schmidt. Mit Atlas. 1844.
18. Cementir-, Tüncher- und Stuccaturarbeit, in der Gebäude- und Zimmermalerei, in Anstrichen und Lackiren, in Gyps- und Holzvergoldung, im Aufziehen von Tapeten. L. Hüttmann. Mit Atlas. 1842.
19. Treppenbau. Selbstunterricht für Tischler, Zimmerleute und Maurer. Marius Wölfer. 4te Aufl. Mit Atlas. 1843.
20. Chocoladefabrikant. Auch Darstellung von homöopathischer und Gesundheitschocolade; Recepte für Chocolade-Surrogate; Characteristik der Cacaosorten und der Gewürze, Aromata und Satzmehlarten der Chocolade. Ch. H. Schmidt. 3te Aufl. *Illus.* 1848.
21. Färberei auf Wolle, Seide, Baumwolle und andere Stoffe. Anhang: Flecken auszubringen, Farben herzustellen. Riffault. Aus dem Französischen. Heinr. Leng. 1826.

21*. Clavierstimmen. Auch Anleitung zur Prüfung, Erhaltung und Wiederherstellung der Instrumente. Nach dem "Accordeur" des G. Armelino. Mit Atlas. 1857.

22. Maurerhandbuch, zur Kenntniss der Maurermaterialien und Arbeiten. Carl Matthaey. 3te Aufl. von J. C. G. Hampel. Mit Atlas. 1843.
23. Steinhauerhandbuch. Carl Matthaey. 3te Aufl. von J. C. G. Hampel. Mit Atlas. 1843.
24. Destillirkunst und Liqueurfabrication. Vorschriften zur Verfertigung und Veredlung der einfachen und doppelten Branntweine und Liqueure. C. F. B. Schedel. 3te Aufl. von Giacomo Perini. *Illus.* 1841.
25. Fabricant bunter Papiere. Verfertigung aller Arten farbiger und bunter Papiere; Atlas-, Maroquin-, Saffian-, Marmor-, Porphyr-, Kattun-, Iris-, Tapeten-, Wachs-, Oel- und Rostpapiere. Deren Vergoldung, Lackirung und Aufziehen. C. F. G. Thon. 3te Aufl. Mit Atlas. 1844.

25*. Tapeten- und Buntpapier-Industrie, für Fabrikanten, Gewerbtreibende und technische Institute. Dr. W. F. Exner. Vorwort von Dr. Karl Karmarsch. Mit Atlas. 1869.

26. Stein- oder Dammsetzer. Construction und Pflasterung der Strassen. Anleitung zur Gründung der Städte, und Anlegung ihrer Spaziergänge, Strassen, Fahr- und Fusswege. Carl Ludwig Matthaey. Mit Atlas. 1827.
27. Bau der Reitsättel und Kummte. Anhang über Riemerarbeit der Halftern, Zäume und Geschirre. Friedr. Schulze. *Illus.* 1827.
28. Kalk- und Gypsbrennerei. Selbstunterricht. Marius Wölfer. Mit Atlas. 1827.

28*. Kalkwerken, Gypsmühlen und Cement'abriken. Mit Literatur-Nachweis und Tabellen. Emil Böhmer und Friedr. Neumann. 4te Aufl. *Illus.* 1870.

29. Oenologie. Kultur, Kelterung, Behandlung, Veredlung und Aufbewahrung der Weine. Beobachtungen über Obstweine, Weinessig und Branntweine. Nach dem Französischen des Aubergier, von Joseph Servière. *Illus.* 1827.
30. Landuhrmachers Handbuch. Auch Beschreibung der nöthigen Werkzeuge. Jacob Auch. *Illus.* 1827.
31. Nadler, Drahtzieher und Kardätschenmacher. Roth- und Gelbgiesser-Arbeiten. Deren Materialien, Maschinen und Werkzeuge. J. D. A. Höck. Mit Atlas. 1827.

31*. Reinnel's Receptbuch für Maurer, Tüncher, Stubenmaler, Stuccaturarbeiter und Cementirer. A. W. Hertel. *Illus.* 1856.

32. Juwelier. Unterricht über den Schnitt, das

Digitized by Google

Neuer Schauplatz—Continued.

Gewicht und den Werth der Diamanten und Perlen. Joh. Gottl. Beumenberger. *Illus.* 1828

33. Essig und Senfbereitung. Julia Fontenelle. Aus dem Französischen, von Gust. Heinr. Haumann. 2te Aufl. 1844.
34. Mauer- und Dachziegeln. Einrichtung einer Dachziegelei für Kramp-Breitziegln etc. P. Schaller. 2te Aufl. Von Carl Matthaey. Mit Atlas. 1841.
35. Stereoskop. Seine Geschichte, Theorie, Construction und Anwendung auf Künste und Unterricht. Aus dem Englischen des Sir David Brewster, von Ch. Heinr. Schmidt. *Illus.* 1857.

35*. Wachsfabricant und Wachszieher. Erzeugung und Behandlung des Honigs, Wachses, Talgs; Anlegung einer Wachsfabrik; Verfertigung der Wachslichter, Fackeln, durchsichtigen Kerzen; Geschichte und Literatur des Gewerbes. G. P. F. Thon. Mit Atlas. 1828.

36. Oelbereitung, Oelreinigung und Gasbeleuchtung. Julia Fontenelle. Aus dem Französischen, von Gust. Heinr. Haumann. 2te Aufl. *Illus.* 1844.
37. Geigenbau. Reparatur der Violinen, Bratschen, Schellos und Bässe, auch Pianoforte-Guitarren, Erbauung der Werk- und Schnitzbänke; Kenntniss aller Werkzeuge, mit Lehren der Akustik und Tonkunst. Gust. Adolf Wettengel. Mit Atlas. 1828.
38. Hutmacherkunst. Verfertigung aller Sorten Filzhüte, auch Filtrir- und Federhüte, Filzschuhe, Stiefeln, Socken, Sohlen etc. Carl Pilzecker. Mit Atlas. 1828.
39. Stärke- und Puderbereitung, Stärkegummi- und Stärkezuckerfabrication. Franz C. A. Bergmann. 2te Aufl. Von C. H. Schmidt Mit Atlas. 1846.

39*. Handbuch der Stärkefabrication, der Dextrin-, Stärkesyrup- und Stärkezuckerfabrikation. Ladislaus Wagner. Mit Atlas. 1876.

40. Gebäude-, Zimmer- und Strassenerleuchtung durch Oel, Talg, Wachs und Gas. Bereitung und Reinigung dieser Materialien. Nach dem Französischen des Péclet, von Joh. Christ. Gottlob Weise. 2te Aufl. Von Carl Hartmann. Mit Atlas. 1847.
41. Linirkunst. Anleitung Geschäfts- und Handlungsbücher, Notenpapier etc. zu liniren; die Tinten und Werkzeuge zu verfertigen: auch Abbildung 2 Linir-Maschinen. Nach dem Französischen von Carl Ferd. Leischner. 2te Aufl. J. G. Frenzel. Mit Atlas. 1839.
42. Frisirkunst und Haar-Schmuck. Auch Mittheilungen über die Natur und Erhaltung der Haare und über Hautkrankheiten. Nach Villaret und Normandin. *Illus.* 1829.
43. Lithographie und Zinkographie. Anleitung zur Anfertigung von Steinzeichnungen, zur Lithochromie; auch Beschreibung der Apparate zum Steindrucke. Nach Peschek, von Leo Bergmann. Mit Atlas. 1843.

Neuer Schauplatz—Continued.

44. Seidenbau. Anweisung zur Maulbeerbaum- und Seidenraupenzucht. Gustav Heinrich Haumann. *Illus.* 1829.
45. Bleiarbeiter. Brunnen-, Röhren-, Pumpen- und Spritzenmeister. Erklärung hydraulischer Kunstausdrücke. Nach dem Französischen des Janvier und Bis'on. J. G. Petri. 2te Aufl. von Carl Alfing. Mit Atlas. 1841.
46. Bereitung und Anwendung des Chlors in chemischer, medicinischer, ökonomischer und technischer Hinsicht. Aus dem Holländischen des S. Stratingh, von C. G. Kaiser. Mit Atlas. 1829.
47–49. Verrichtungen der Zimmerleute. 1ster Theil. Mathematische Vorkenntnisse des Zimmermannes. 2ter Theil. Materialien des Zimmermannes. 3ter Theil. Arbeiten des Zimmermannes, mit Lehre von Treppen; und über Hänge, Sprengwerke und Bohlenbogenconstruction und. Mit Atlas. 1840, 1845.
50. Schlossermeister. Handbuch ihrer Kunst, mit Bau der Brückenwaagen. Nach dem Französischen des Grandpré von J. G. Petri, C. H. Schmidt und Andern. 4te Aufl. Mit Atlas. 1843.
51. Ofenbaumeister und Feuermechanist. Anwendung der neuesten Heizungs- und Erwärmungsarten, mit Beispielen neuer Oefen und Kamine. Carl Matthaey. 3te Aufl. von C. Hartmann. Mit Atlas. 1847.
52. Bildhauer. Modelliren in Marmor, Alabaster, Holz, und Steinarten; Schleifen, Poliren und Vergoldung der Arbeiten, C. Ludwig Matthaey. Mit Atlas. 1830.
53. Klempner und Lampenfabrikant. Belehrung über Eisen-, Messing- und Zinkblech-Arbeiten und Werkzeuge; Grundsätze der Erleuchtungskunst; Fabrication der Oel-, Talg- und Weingeist-Lampen, Kronleuchter, Schirme, Glaskugeln etc.; sie zu malen, lackiren, vergolden. Nach dem Französischen des M. Lebrun, von D. H. Leng. 3te Aufl. von Ch. H. Schmidt. Mit Atlas. 1843,
54. Kupfer- und Stahlstecher, und Kunst in Holz zu schneiden. Auch Zeichnen und Stechen auf Zink mit chemischem Abdruck solcher Platten. Nach dem Französischen von Theod. Thon. Mit Atlas. 1831.
55. Reisskunst. Grundsätze des Zeichnens mit Lineal und Zirkel, auch aus freier Hand. Nach Musterzeichnungen und Natur. Theod. Thon. 2te Aufl. von F. Durand. Mit Atlas. 1840.
56. Kunst weisses Steingut mit durchsichtiger Glasur anzufertigen; nebst Abhandlung über eingeschmolzene Steingutfarben. Aus dem Französischen des Bastenaire-Daudenart, von Georg Frick. Mit Atlas. 1832.
57. Mühlenbau und Mehl-Fabrication. Anlegung und Construction von Wasser-, Wind- und Dampfmühlen zur Anfertigung von Mehl, Graupen, Lohe, und zum mahlen von Kaffee, Cacao und Farben. Dr. W. Weinholz. 2te

Digitized by Google

Neuer Schauplatz—Continued.

und 3te Aufl. von Fr. W. Barfuss und Karl Hartmann. Erster Theil. 1843.

58. Mühlenbau und Mehl-Fabrication. W. Weinholz. 2te und 3te Aufl. von Fr. W. Barfuss und Karl Hartmann. Zweiter oder specieller Theil. Mit Atlas. 1843.

59. Papparbeiten, als Toiletten, Etuis, Körbchen und Taschen, Vasen etc.; auch Pappen- und Spielkarten-Fabrication; sowie Verfertigung vergoldeter Papiere, Firnisse etc. Nach dem Französischen, von Carl Fr. Leischner. 2te Aufl. von E. Schmied. Mit Atlas. 1841.

60. Pfeifenköpfe. Verfertigung aller Arten meerschaumener, auch Talg-, Wachs-, Holz- und Oelköpfen. Nebst Anweisung meerschaumene Pfeifenköpfe anzurauchen, färben, reinigen und kitten. Ch. Friedr. Gottl. Thon. 2te Aufl. 1843.

61. Dachdecker. Unterricht in allen Dachbedeckungsarten, für Ziegel-, Stein-, Schiefer-, Lehm-, Schindel-, Stroh- und Rohrdecker. Carl Ludwig Matthaey. Mit Atlas. 1833.

62. Gewerbskunde. Anleitung zur Kenntniss und Beurtheilung aller Handwerke, Künste, Fabriken und Manufacturen, auch Waaren-, Produkten- und Maschinenkunde. H. Leng. Mit Atlas. 1834.

63. Juwelier, Gold-, Silber- und Schmuckarbeiter. Beschreibung der edlen Metalle, der Perlen und Edelsteine, der Emaillen und Mosaik, der Plattirung und Goldfarben, sowie deren Verfertigung und Anwendung. Methoden der Feinmachung, Scheidung und Probirkunst. Schätzung und Schneiden der Edelsteine. August Bürck. Mit Atlas. 1834.

64. Riemer und Sattler. Beschreibung aller Arbeiten, der Reitzeuge, Kutschen- und Wagengeschirre, Decken, Kummte, Sattelkissen; Ausschlagen aller arten Wagen; Erfindungen und Verbesserungen. Nach dem Französischen des Lebrun, von Jac. E. Cilliax. 4te Aufl. *Illus.* 1846.

65. Wagner, Stellmacher und Chaisenfabrikant. Construction und Behandlung des Wagens; Material, Werkzeug und Arbeiten des Stellmachers, des Schmiedes, des Sattlers, des Gürtlers und Lackirers. Construction der Eisenbahnwaggons. Nach Lebrun, von L. Beckmann. Mit Atlas. 1848.

66–68. Grundsätze der Werkzeugswissenschaft und Mechanik. 1ster Theil. Allgemeine Grundsätze der Mechanik; Anwendung der mechanischen Potenzen und einfachen Werkzeuge; deren Kräfte und Dimensionen. 2ter Theil. Anwendung von Räderwerken und mechanischen Zusammensetzungen bei der Erbauung von Maschinen. 3ter Theil. Wirkungen niedersteigender Gewichte und gespannter Federn; Kräfte von Menschen und Thieren auf Maschinen ausgeübt; Grundsätze des Gleichgewichtes und der Bewegung tropfbarer und elastischer Flüssigkeiten. G I. Verdam. Aus dem Holländischen, von Chr. Heinr. Schmidt. Mit Atlas. 1835.

69–71. Dampfmaschinen. Beurtheilung und Erbauung aller Arten. 1ster und 2ter Theil. Betrachtung und Berechnung der mechanischen Kraft des Dampfes, Arten und Formen von Dampfmaschinen. 3ter und 4ter Theil. Dimensionen, Einrichtungen und Formen der Bestandtheile der Dampfmaschinen. G. I. Verdam. Aus dem Holländischen, von Ch. H. Schmidt. Mit Atlas. 1848.

72. Zucker-Fabrication, namentlich des Runkelrüben-, Rohr- und Stärkemehlzuckers. Ch. H. Schmidt. 2te Aufl. Mit Atlas. 1847.

73–74. Papier- und Pappfabrication, auch die Kunst des Formers. Aus dem Französischen des L. S. Lenormand, von Dr. Wilh. Weinholz. Mit Atlas. 1835.

75. Anfertigung des durchsichtigen Porcellans und weissen Steinguts, Erbauung der Massenmühlen. Schlemmerei, Massenkochöfen, Brennöfen und Abdrehmaschinen. Laboration der Mineralfarben für Porzellan-, Steingut und Glasmalerei, Holz und Kohlenmuffeln. Ludwig Friedr. Schumann. Mit Atlas. 1835.

75*. Fabrikation des weissen Feldspath-Porzellans und dessen Dekorirung mit Starkfeuer-Farben. Karl Streie. Mit Atlas. 1868.

76. Anlegung und Ausführung aller Arten von Eisenbahnen, nebst Kostenberechnungen. Nach dem Französischen des Biot, von Ch. Heinr. Schmidt. Mit Atlas. 1835.

77. Korb- und Strohflechtkunst, und Siebmacherei. Anleitung alle Korbgattungen zu machen, durch Beizen etc. verschönern; Stroh zu waschen und bleichen; Strohhüte etc. zu flechten; Gewebe aus Holz, Draht und Pferdehaaren, auch Siebe aus Pergament zu verfertigen. E. Schmied. Mit Atlas. 1843.

78. Gnomonik. Construction von Sonnenuhren mit Thierkreislinien und Beleuchtungsscalen. Hermann Sternheim. 2te Aufl. Mit Atlas. 1842.

79. Glasfabrikation nach allen ihren Haupt- und Nebenzweigen. Darstellung aller Glasfabrikate. Schleifen, Schneiden, Aetzen, Incrustiren etc. des Glases. Einrichtung der Oefen, Schmelzhäfen und Materialien. Heinr. Leng. Mit Atlas. 1835.

80–81. Metallurgie. Gewinnung und Verarbeitung der in den Künsten und Gewerben nutzbaren Metalle. C. Hartmann. 2te Aufl. *Illus.* 1847.

82. Rathgeber und Receptbuch für Künstler und Professionisten zum Poliren, Beizen, Lackiren etc. Aus dem Englischen des G. A. Siddons, von C. H. Schmidt. Mit Atlas. 1842.

83. Geheimnisse der englischen Gewehrfabrikation und Büchsenmacher-Kunst. Erzeugung der Eisensorten zu Jagdgewehren. Verfahrungsarten der deutschen Gewehrfabriken. Aus dem Englischen des William Greener, von C. H. Schmidt. *Illus.* 1842.

84. Handschuhfabrikation. Kunst das Handschuhleder zu gerben, färben und zu verarbeiten. Anhang alle Flecke zu verhüten, auch zu beseitigen. Nach dem Französischen des Valle-d'Artois, von Dr. Heinrich Leng. *Illus.* 1836.

Digitized by Google

Neuer Schauplatz—Continued.

85. Kunst des Messerschmiedes. M. H. Landrin. Aus dem Französischen von H. Leng und C. H. Schmidt. *Illus.* 1836.
86. Fabrikation des Beinschwarzes, Ammoniak, Salmiak, Glaubersalz, Phosphorus, Phosphorsäure, blausauren Kalis, Pariser und Berliner Blaus. Auch Bauplan einer Fabrik. Carl Wilhelm Rösling. Mit Atlas. 1836.
87. Staffirmalerei und Vergoldungskunst, zur Verschönerung und Erhaltung der Arbeiten. Anhang zu "Thon's Lackirkunst". Ch. Fr. Gottl. Thon. 2te Aufl. von C. H. Schmidt. 1846.
88. Töpferwaare. Ofentafeln, Steinzeug mit Glasuren anzufertigen. Beschreibung der Brennöfen, Glasurmühlen, Drehscheiben. Aus dem Französischen des Bastenaire-Daudenart, von Ch. H. Schmidt. 2te Aufl. Mit Atlas. 1843.
89. Abhandlung über Klavier-Saiten-Instrumente, Forte-Pianos und Flügel, deren Ankauf, Beurtheilung, Behandlung, Erhaltung und Stimmung. Ch. F. G. Thon. 3te Aufl. Mit Atlas. 1843.
89¹. Lehrbuch des Pianofortebaues in seiner Geschichte, Theorie und Technik. Julius Blüthner und Heinrich Gretschel. Mit Atlas. 1872.
90. Geschichte der Uhrmacherkunst. F. Barfuss.
91. Seiler-Handwerk. Anbau und Zubereitung des Hanfes. Fertigung und Anwendung aller Gross- und Klein-Seilerwaaren, Fisch-, Vogel- und Fliegennetze. Fabrication aller Pech-, Theer-, Oel- und Thrangattungen, auch einer Wagenschmiere. Marius Wölfer. *Illus.* 1837.
92. Kunst- und Lustfeuerwerkerei, mit Auswahl der schönsten farbigen Sätze. F. C. A. Büttner und F. M. Chertier. 7te Aufl. von Heinr. Hamberger. 1843.
93. Handbuch des Baumwollen-Manufakturwesens. Naturgeschichte, Cultur und Verarbeitung der Baumwolle. Geschichte ihrer Manufaktur. Andreas Ure. Deutsch von Carl Hartmann. 2te Aufl. Mit Atlas. 1843.
94. Pergamentmacher, Leim- und Potaschensieder. Nach den neuesten Erfindungen. Marius Wölfer. Mit Atlas. 1838.
95. Praktische Anleitung zum Branntweinbrennen, insbesondere des Kartoffelbranntweins. Verfahren den Branntwein zu prüfen, reinigen, veredeln. Verordnungen über den Betrieb des Brennens und die Besteuerung des Branntweins. Abbildungen von Brenngeräthschaften, Grundrissen von Brennereien, Formularen, Tabellen. Christ. Friedr. Gottl. Thon. 2te Aufl. *Illus.* 1841.
96. Grundsätze der Bierbrauerei, nach den neuesten technisch-chemischen Entdeckungen. Kunst Bier zu brauen, Brauhäuser mit Keimtennen, Malzdarren und Kellern anzulegen und einzurichten. Mit besonderer Berücksichtigung der baierischen Brauerei. Verfahren in Oesterreich, Belgien, England, Schottland, am Rhein, in den Niederlanden. Recepte zu Luxusbieren. C. H. Schmidt. Mit Atlas. 1838.
97. Probirkunst. Anleitung Metallgemische auf dem trocknen und nassen Wege zu untersuchen. Nach Chandet, deutsch von Carl Hartmann. 2te Aufl. 1847.
98. Zweckmässigste Construction und Einrichtung der Dampfschiffe und deren Dampfmaschinen. Beschreibung eines neuen Locomotionsapparates. Janvier. Frei übertragen mit einem Anhange über die Course aller Dampfschiffe in Europa, von Ch. H. Schmidt. 2te Aufl. Mit Atlas. 1842.
99. Praktischer Mühlenbauer, oder Zeugarbeiter. Handbuch zum Selbstunterricht. L. Bergmann. 2te Aufl. von K. H. Kögel. *Illus.* 1846.
100. Grundsätze zur Beurtheilung und Erbauung von Dampfmaschinen. Ergänzungsband (Werkzeugwissenschaft IV.). G. I. Verdam. Aus dem Holländischen, von C. H. Schmidt. Mit Atlas. 1843.
101. Kupferschmiedhandwerk, mit Vorlehren über die Erzeugung und Behandlung des Rohkupfers und Produkte. F. Höhne, E. W. Rösling. *Illus.* 1839.
102. Kunst des Böttchers oder Küfers in der Werkstatt wie im Keller. Anleitung zur Rechnen- und Zeichnenkunst; Anweisung den Inhalt von Gefässen zu finden und jedes Gefäss nach verlangtem Gehalt zu verfertigen. Angabe aller Mittel, Vortheile und Werkzeuge zur Ausarbeitung der Dauben und Verfertigung der Fässer, Bottiche etc. 2te Aufl mit Anhang über die Verrichtungen des Küfers im Bier- und Weinkeller. C. H. Schmidt. *Illus.* 1847.
103. Handbuch der Metallgiesserei, Anweisung in Sand, Masse und Lehm zu formen; mit Eisen, Messing, Gold etc. in diesen Formen sowie in metallenen Schalen, durch den Guss, Glocken, Statuen, Geschütze, Lettern etc. herzustellen. Anhang über Emailliren und Verzinnen gusseiserner Gefässe. C. Hartmann. Mit Atlas. 1840.
104. Feuerzeugpraktikant. Beschreibung aller Feuererzeugungs-Apparate und Zündwaaren. Fabrikation der Zündstoffe und anderen Requisiten. Anleitung Platinfeuerzeuge zu erhalten; Schwefelsäure und Phosphor von Arsenik zu reinigen; auch Krankheitserscheinungen in Zündhölzchen-Fabriken vorzubeugen. 2te Aufl. Mit Atlas. 1847. C. H. Schmidt.
105. Kunst des Posamentirers, Bandfabrikanten, Bortenwirkers, Knopf- und Krepinmachers. Weben und Drucken aller Arten Bänder und Borten, aller Sorten Tressen, Fransen; Dochte und Schläuche ohne Naht zu fertigen, die Wasserdichtheit der letztern zu erhöhen. Fr. A. Reimann. *Illus.* 1840.
106. Linnen- und Tischzeugweberei. G. Sennewald. Mit Atlas. 1840.
107. Holzbeizkunst, oder Holzfärberei, nebst Mittein die gebeizte Holzarbeit zu verschönern und zu erhalten. Anhang: Elfenbein, Knochen und Horn zu beizen und poliren 2te Aufl. Ch. Fr. Gottl. Thon. 1840.

Digitized by Google

Neuer Schauplatz—Continued.

107*. Beizen, Schleifen und Poliren des Holzes, Elfenbeins, Horns, der Perlmutter und Knochen; sowie deren Conservirung und die Verschönerung der Kunst- und Industriearbeiten. Wilhelm Schmidt. 5te Aufl. *Illus.* 1871.

108. Gürtler und Broncearbeiter. Darstellung der Arbeiten; Verfertigung Galanterie-Waaren; Beschreibung der Maschinen; Anleitung für Förmerei und Gieserei; Anfertigung der Bronce, der Goldfarben, Schlagloth etc. August Wallack. Mit Atlas. 1840.

109. Cur- und Hufschmied. Anweisung zum Beschlage gesunder und fehlerhafter Hufe; sowie zu den Heilmitteln in Pferde-Operationen. J. F. Zerrenner. Mit Atlas. 1841.

110. Handbuch der gesammten Lohgerberei; namentlich in Beziehung des gemeinen Lohgahren, des Juften-, jämtländisch- und dänischen Leders, des Saffians, Corduans und Chagrins. Neue Lederkünsten und Beschreibung der Maschinen. C. H. Schmidt. 2te Aufl. Mit Atlas. 1847.

111. Lederfärbekunst. Chemische Grundsätze und Vorschriften alle Ledergattungen in allen Farben zu färben, mit farbigen Mustern zu bedrucken, und zu lackiren. Mittheilung der englischen Fixfärberei der Handschuhleder. Ch. Heinr. Schmidt. 2te Aufl. Mit Atlas. 1848.

112. Brennmaterialkunde. Eigenschaften der rohen und durch Verkohlung und Vercoakung dargestellten Brennstoffe. Nebenproducte, als Holzessig, Theer etc. Gewinnung der Knochenkohle; Wirkung der Brennmaterialien; Grundsätze der Heizung. 2te Aufl. Carl Hartmann. Mit Atlas. 1847.

113. Pulverfabrikation, sowie Bereitung der Schiessbaumwolle und Schiessheede. Von einem deutschen Techniker. 2te Aufl. *Illus.* 1847.

114. Versuche Edelsteine kunstgemäss zu schleifen, sie in Glasflüssen nachzubilden. Übersicht schleifbarer Mineralien; Abbildungen facettirter Edelsteine und deren Werkzeuge. L. v. Könneritz. Mit Atlas. 1841.

115. Kammmacher, Horn- und Beinarbeiter. Angabe alles Werkzeugs, Einrichtung der Werkstatt, und des Geheimnisses der Hornbeizkunst. Heinr. Kühn. Mit Atlas. 1841.

116. Handbuch des Seidenmanufacturwesens. Darstellung der Seidenzucht, des Abhaspelns der Cocons, des Zwirnens der Seide, der Zubereitung der Floretseide, Verarbeitung der Seide. Anhang von Bortenwirkerei. Von einem deutschen Techniker. 2te Aufl. Mit Atlas. 1847.

117. Vollständiges Farben-Laboratorium. Bereitung der Erd-, Metall-, Lack-, Saft-, Honig-, Pastell- und Tuschfarben. Chr. H. Schmidt. 2te Aufl. Mit Atlas. 1847.

118. Fabrication der Farben der Glas-, Email- und Porcellanmalerei. Darstellung der Materialien und chemischen Producte; Einbrennen der Malereien. 2te Aufl. C. H. Schmidt. Mit Atlas. 1848.

Neuer Schauplatz—Continued.

119. Bürsten- und Pinselfabrikant. Anweisung Bürsten verlangter Couleur zu verfertigen, die angewendeten Holzarten zu beizen, poliren. Verfertigung der Federbüsche und Federbesen, auch Modeartikeln. Farben der Fädern. K. Hoppe. Mit Atlas. 1842.

120. Belehrung über die Anstellung und Führung der Waldindigküpe sowie über die Krankheiten derselben, nebst Angabe ihrer Kennzeichen und Heilmittel, und Sammlung von Stahlproben. Carl Friedr. Scherf. 2te Aufl. *Illus.* 1848.

121. Lehre der Mannsschneiderei. Geometrische und corporis metrische Maassnehmungsmethode und Zuschneidekunst; Reduciren und Transportiren der Patronen; Winken über Zusammensetzung, Bearbeitung, Veränderungen etc. Netzung und Decatirung; Berechnung des Tuchbedarfs. Heinr. Dietz. 2te Aufl. Mit Atlas. 1845.

122. Handbuch des Woll-Manufactur-Wesens. Naturgeschichte und Zucht der Schaafe; Gewinnung und Verarbeitung der Wolle zu Tuch und zu kammwollenen Zeugen. Dr. C. Hartmann und Ch. H. Schmidt. 2te Aufl. Mit Atlas. 1848.

123. Galvanoplastik. Anweisung Münzen, Medaillen, in metallischer Form zu reproduciren; Kupferplatten etc. zu ätzen und vervielfältigen; Metalle zu vergolden, etc. Ueberblick über Daguerreotypie und Kalotypie. Aus dem Englischen des Charles Walker, von C. H. Schmidt. *Illus.* 1843.

124. Anlage und Benutzung gegrabener und artesischer Brunnen. Carl Hartmann. 2te Aufl. Mit Atlas. 1848.

125. Illuminirkunst. Unterricht im Illuminiren und Tuschen; in der Gouache- und orientalischen Malerei; im Bleichen der Kupferstiche; in der Malerei mit sympathetischen Farben; in der Bereitung und Mischung der Farben, und in der Fabrikation der Tusch- und Farbenkasten. Nach Blanchard, Perrot und Thillaye, von Ch. Heinr. Schmidt. 2te Aufl. Mit Atlas. 1848.

126. Fabrikation der Regen- und Sonnenschirme, sowie der Fächer. Reparaturen dieser Fabrikate. C. Schmied. *Illus.* 1843.

127. Handbuch für Locomotiven-Führer. Anweisung über die Einrichtung, Behandlung und Führung der Locomotive-Dampfmaschinen. E. Flachat und J. Petiet. Aus dem Französischen. Dr. Carl Hartmann. 2te Aufl. Mit Atlas. 1846.

128. Maschinen-Flachs-, Hanf- und Werg-Spinnerei. Theoretische und praktische Elemente. N. Cholmet. Aus dem Französischen. Chr. Heinr. Schmidt. Mit Atlas. 1842.

129. Schlangen-Feuerlösch-Spritzen. Theoretisch und practisch bearbeitet von Carl Alfing. 2te Aufl. Mit Atlas. 1849.

130. Kürschnerkunst. Anweisung Pelzwerke zu gerben, blenden, färben, verarbeiten und aufbewahren. Naturgeschichte über die Pelzthiere und Felle im Pelzhandel. Schilderung

Digitized by Google

Neuer Schauplatz—Continued.

des Pelzhandels. Chr. H. Schmidt. 2te Aufl. *Illus.* 1847.

131. Beiträge zur Büchsenmacherkunst und zur Beurtheilung der Schiessgewehre. J. Schmidt. *Illus.* 1843.

132. Kleinigkeitsfärber. Anweisung Zeuge zu färben und appretiren, auch Farben von Stoffen abzuziehen. Carl Friedr. Scherf. 2te Aufl. 1848.

133. Kunst des Vergoldens, Versilberns etc. Argentiren des Eisens und die Metalle mit Aluminium zu überziehen, mittelst galvanischer Batterien, oder auch ohne Apparat, mittelst hydroelectrischen Contacts. Chr. Heinr. Schmidt. 3te Aufl. Mit Atlas. 1862 and 1843.

134. Academie der zeichnenden Künste und der Malerei. Elemente der Anatomie; Ausdruck der Leidenschaften; Grundzüge der Portrait-Blumen- etc. Malerei; geometrische Projectionslehre; Linear-, freie und Luftperspective; Baukunst; Lehre von dem Lichte und Farben, und der Chemie der letzteren. Malerei in Crayon, Pastel, in Lavis, in Miniatur, Gouache, Oel- und Schmelzfarben. A. W. Hertel. Mit Atlas. 1844.

135. Baumwollenweberei, mit Berücksichtigung der Roupen-Gewebe. Bleichen, Färben und Appretiren der Baumwolle. Wattenfabrikation. Chr. Heinr. Schmidt. *Illus.* 1844.

136. Kitt-Kunst. Anleitung Kitten und Mörteln zu bereiten, mit Erfolg und Dauer anzuwenden. C. F. G. Thon. 1844.

137. Löth-Kunst. Anleitung Löthe und Legirungen zu bereiten, Metalle und Metall-Compositionen zu löthen. C. F. G. Thon. *Illus.* 1844.

138. Handbuch der Schriftgiesserei und der Nebenzweige: Stereotypie, Abklatschen, Holzschneidekunst, Gravüren in Zink, Zinn, Schriftmetall, Kupfer- und Stahlstich, Hochlithographie, etc. Adolf Henze. Mit Atlas. 1844.

139. Kattunfabrikation und Kunst Seide und seidene Zeuge zu färben. F. W. Geest. 2te Aufl. *Illus.* 1848.

140. Treppenbau. Anleitung im Zeichnen, Zureissen, Errichten aller arten hölzerner Treppen, nebst Bemerkungen über steinerne Treppen. Nach dem Französischen des C. Bouterau, von J. A. Schultz. Mit Atlas. 1845.

141. Lehrbuch des Bleichens und der gesammten Färberei auf baumwollene Garne und Gewebe. F. A. W. Geest. Mit Atlas. 1846.

142. Feuerungskunde. Anlegung von Heerden, Schornsteinen, Kaminen, Stubenöfen, Heizgewölben, Dampf- und Warmwasser-Heizungen, Lüftungsapparaten etc. Nach E. Péclet, von Carl Hartmann. Mit Atlas. 1846.

143–145. Maschinenbauer. Atlas und Beschreibung der Maschinen-Elemente. Fortsetzung des Werkes des Le Blanc, von Dr. Carl Hartmann. 1848.

146. Coloriren und Decoriren des Porcellans, Steinguts, Wedgwoodgeschirrs, Steinzeugs und der Fayence, mit verglasbaren Farben und Metallen. Brennen dieser Farben und Metalle. Alexander Brongniart. Deutsch von C. H. Schmidt. Mit Atlas. 1846.

146*. Technik des Kolorirens und Dekorirens von Porzellan, Steingut, Glas etc., durch Bemalen, Bedrucken, Übertragen von Photographien, mit Email und Metallen, sowie das Einbrennen derselben und Poliren der Metalle. 3te Aufl. Karl Streie Mit Atlas. 1869.

147. Restauration alter und schadhaft gewordener Gemälde. Anleitung zur Frescomalerei. J. C. G. Hampel. Mit Atlas. 1846.

148. Moderne Bautischlerei. Arbeiten in dem innern Ausbau von Wohnhäuser und Prachtgebäuden. Anweisung Zeichnungen dazu zu entwerfen und auszuführen, sowie Kosten zu berechnen. Lehren über geometrische Constructionen, Inhaltsbestimmungen und schöne Architectur. A. W. Hertel. Mit Atlas. 1847.

149. Fleischer- und Wurstlergeschäft, auf seinem jetzigen hohen Standpuncte. Angabe der Maschinen und Einrichtungen. M. Weintz. Mit Atlas. 1846.

150. Zimmeröfen und Zimmercamine neuester Zeit. Construction der wirksamsten Luftheizungsöfen. Nach dem Französischen von Alex. Schultz. Mit Atlas. 1846.

151. Benutzung des Papiermaché zu Larven, Puppenköpfen, Kinderspielzeug, Bilderrahmen etc. Coloriren und Decoriren dieser Gegenstände mit Kupferstichen und Lithographien. Chr. Heinr. Schmidt. Mit Atlas. 1847.

152. Handbuch des Eisenbahnwesens. Darstellung der Anlage, Einrichtung und des Betriebes der Eisenbahnen. Nach dem Englischen des Robert Ritchie, von Carl Hartmann. 2te Aufl. Mit Atlas. 1853.

153. Bäckerhandwerk. Anweisung das Brodgetreide zu beurtheilen, aufbewahren, vermahlen und mit Gährungsmitteln in Brod, Luxusgebäck etc. zu verwandeln. Beschreibung der neuesten Backoefen und Angabe erprobter Hefenrecepte. C. H. Schmidt. Mit Atlas. 1847.

154. Der Asphalt und seine Anwendung in der Technik. Darstellung aller Asphalte; deren Verwendung zum Belegen von Wegen, Höfen, etc.; zur Bereitung von Isolirschichten, Dachdeckungen; zur Darstellung der Asphalt-Pappen, -Röhren und -Firnissen, mit Benutzung dieser Materialien. W. Jeep. Mit Atlas. 1867.

155. Bleiweiss- und Bleizuckerfabrication, nach allen vorhandenen Methoden. Heinrich Ludowig. *Illus.* 1847.

156. Zusätze zur 1sten Auflage von Dr. Ch. H. Schmidt's vollständigem Farben-Laboratorium. Die Fortschritte der Fabrikation seit 1841. 1847.

157. Handbuch der Webekunst in Baumwolle, Leinen, Wolle und Seide, mit Hand- und Maschinen-Webestühlen, zur Anfertigung der glat-

Digitized by Google

Neuer Schauplatz—Continued.

ten und gemusterten Zeuge. Gilroy, Falcot und White. Mit Atlas. 1847.

158–159. Handbuch über den Bau, die Aufstellung, Behandlung, Bedienung, Heizung, Abwartung und Conservirung der Dampfmaschinen. Nach dem Französischen des Grouvelle, Jaunez und Juillen, von Carl Hartmann. *Illus.* 1847.

160. Der treue Führer beim Schürfen. Merkmale der Lagerstätten zur Schürf- und Rohrversuche auf Erzgänge, Kohlen-Flötze, Steinsalz, Braunstein, Salzquellen, etc. Nach Combes, Degoussée und Andern, von Carl Hartmann. Mit Atlas. 1848.

161. Der wohlunterrichtete Hohofen- und Hammermeister. Carl Hartmann. Mit Atlas. 1848.

162–163. Handbuch des Zeugdrucks und der damit verbundenen Färberei. 1ster Theil: Grundsätze und Anwendung der Chemie und Physik bei den Operationen der Färberei und des Zeugdrucks. 2ter Theil: Verfahrungsarten. J. Persoz. Ch. Heinr. Schmidt. Mit Atlas. 1848.

164. Bierbrauerei aus Kartoffeln. Anweisung zur Bereitung guter Kartoffelbiere. Heinrich Ludowig. *Illus.* 1848.

165. Verfertigung der Gypsfiguren und des Gypsmarmors für Maurer und Tüncher, sowie Darstellung der Kupferfiguren durch die Galvanoplastik. C. Schmied. *Illus.* 1848.

166. Luftschifffahrtskunde, und ihre Anwendung zur Communication, zu Reisen und Gütertransportation. Nach Edm. Marcy-Monge und Andern, von Ferd. Steinmann. Mit Atlas. 1848.

167. Auffindung, Gewinnung und Förderung der mineralischen Brennstoffe, namentlich des Torfs, der Braun- und Steinkohle. Nach Burat, Combes und Andern, von Carl Hartmann. Mit Atlas. 1848.

168. Grundriss der Schlosserkunst, mit Maschinen zur schnellen Verfertigung der Schlosserarbeiten. Anhang erprobter Recepte zur Verbesserung der Metalle. Johann König. Mit Atlas. 1848.

169. Der geschickte Grob- und Hufschmied. Anhang über das Schmieden der Aexte, Beile, Ankerwerkzeuge und andern Schneidwerkzeuge, sowie einem Wörterbuche des Schmiedes. Friedr. Harzer. Mit Atlas. 1848.

170. Siegellackfabrikation, nach dem neuesten Verfahren und den bewährtesten Vorschriften. Friedrich Harzer. 1848.

171. Vollständiges Handbuch der Uhrmacherkunst. Emanuel Schreiber. *Illus.* 1848.

172. Gesetze der Farbenharmonie für Haus-, Stuben und Decorationsmalerei, für Fabrikation von Tapeten, Teppichen und buntfarbiger Gewebe. Bemerkungen über Hausmalerei. Aus dem Englischen des D. R. Hay, von L. Hüttmann. *Illus.* 1848.

173. Formschneidekunst. Modeln für Zeugdruckerei, Wachstuch, Tapeten, Spielkarten. Ausführung der Buchdruckereivignetten und Versierungen. Guillochiren, Graviren, etc. der Druckwalzen. Chr. Heinr. Schmidt. Mit Atlas. 1849.

174. Operationen, Manipulationen und Geräthschaften der Electrochemie in ihrer Anwendung auf Gold-, Silber- und Broncearbeiten, Galvanoplastik und andere verwandte Gewerbe. A. Brandely. Aus dem Französischen, von Friedrich Harzer. Mit Atlas. 1849.

175. Magnet-Electricität als motorische Kraft-Anwendung des Electromagnetismus auf Telegraphie, sowie auf den Betrieb der Uhren und anderer Maschinen. Friedrich Harzer. *Illus.* 1849.

176. Schreibmaterialist. Kunst, sich selbst alle Arten der Schreibfedern, Siegellacke, Tinten, Oblaten etc. zu fertigen. 2te Aufl. 1849.

177. Glasblasekunst, sowohl auf der Glashütte, als an der Glasbläserlampe. Verfertigung des Hohl- und Tafelglases, der Glasglocken, Glasröhren und Uhrgläser; der Barometer, Thermometer, physikalischer und chemischer Geräthe; der Perlen, künstlichen Augen, Spielzeuge. Spinnen, Schneiden, Springen, Durchlochen, Aetzen, Schleifen, Kitten, Belegen, Versilbern des Glases. Eman. Schreiber. *Illus.* 1849

178–179. Handbuch der neuesten englischen Werkzeugslehre. 1ster Theil: Werkzeuge der Holz- und Hornarbeiter. 2ter Theil: Werkzeuge der Metallarbeiter. Nach Carl Holtzapfel in London, von Carl Hartmann. Mit Atlas. 1849–50.

180. Handbuch der Mikroskopie. Aufstellung, Einrichtung, Behandlung und Gebrauch des Mikroskopes, zum Präpariren und zur Untersuchung von Stoffen aus dem Thier-, Pflanzen- und Mineralreiche und deren Producte. John Quekett. Deutsch von Carl Hartmann. Mit Atlas. 1850.

181. Angaben und Pläne english-amerikanischer Mahlmühlen, sowie von den Einrichtungen der Oel-, Papier-, Loh- und Sägemühlen. Nebst Regeln etc. über Umtriebs-, Zwischen- und Arbeits-Maschinen. Carl Hartmann. *Illus.* 1850.

182. Gasbeleuchtung. Fortschritte und Vervollkommnungen. Carl Hartmann. Mit Atlas. 1850.

183. Tabacks- und Cigarrenfabricant. Verfahrungsarten der Fabrication der Cigarren, des Rauch-, Schnupf- und Kautabacks. Emanuel Schreiber. Mit Atlas. 1850.

184. Perspective, oder die Lehre von den Projectionen, zur Ausführung von technischen und perspectivischen Zeichnungen. A. W. Hertel. Mit Atlas 1851.

185. Handbuch der chemischen Fabrikenkunde. Darstellung des Schwefels und der Schwefelsäure, des Kochsalzes, Natrons, Potasche, Boraxes, Salpeters, Salzsäure, Alauns, Vitriols, Salmiaks, Phosphors und der gashaltigen Wasser. Carl Herzberg. Mit Atlas. 1851.

186. Handbuch der Metalldreherei. Kunst, Metalle auf der Drehbank, dem Drehstuhl, auf Ma-

Digitized by Google

Neuer Schauplatz—Continued.

schinen, und durch Schleifen und Poliren zu bearbeiten. Anhang: über Werkstätten. Werkzeugmaschinen und die Maschinenbauanstalt zu Seraing. Carl Hartmann. Mit Atlas. 1851.

187. Turbinen, oder horizontale Wasserräder, als Kraft- oder Trieb-Maschinen. Ihre Beschreibung, Theorie und Leistung. Friedr. Harzer. Mit Atlas. 1851.

188. Drahtzieher, Nadler und Drahtarbeiter. Beschreibung der Drahtfabrication. Verfertigung der Steck-, Näh-, Strick- und Haarnadeln; der Drahtseile, -stifte, -siebe und anderer Geflechte. Friedrich Harzer. Mit Atlas. 1857.

189. Strassen-, Eisenbahn-, Canal-, Brücken-, Küstendamm-, Deich- und Hafenbau, sowie die Bewässerungsarbeiten. Aus dem Französischen des A. Lixante, von Friedrich Harzer. Mit Atlas. 1857.

190. Lehren der Statik, Dynamik und Hydrostatik, erläutert durch die bekanntesten Maschinen. Anhang: über Gesetze des Lichtes und Schalles. Samuel Newth. Deutsch von Carl Hartmann. Mit Atlas. 1851.

191. Schweitzer Zuckerbäcker. Anweisung Backwerke und Pastetchen mit Fleisch-, Fish- und anderer Fülle auszuführen; künstliche Getränke und Gefrorenes darzustellen; Chocolade und feine belebende Getränke zu bereiten. Giacomo Perini. Mit Atlas. 1852.

192. Handbuch für Locomotiven-Führer. Anweisung über die Einrichtung, Behandlung und Führung der Locomotiv-Dampfmaschinen. Aus dem Französischen des E. Flachat, J. Petiet und Andern, von Carl Hartmann. Ergänzungsband. Mit Atlas. 1852.

193. Färberei des glacirten Coburgs, satinirten Orleans, der Merinos, Damaske und Lastings, der wollenen Garne, der Flanelle, Napolitaines, Serge, Tücher. Nebst Färberei mittelst der Grundirmaschine. David Smith. Deutsch von Chr. H. Schmidt. 1852.

194. Kellereiwirthschaft, oder die Behandlung des Weines, Bieres, Ciders, Rums und Araks in Gebinden und Flaschen im Keller. Chr. Heinr. Schmidt. Mit Atlas. 1852.

195. Kerzen- und Seifen-Fabrication, nach den neuesten Vervollkommnungen dieses Industriezweiges. Chr. Heinr. Schmidt. *Illus.* 1852.

196. Maschinenbauer. Atlas und Beschreibung der Maschinen-Elemente. Ergänzungen zu den Bänden 1 bis 3. Anfertigung der Maschinen-Elemente und Zusammensetzung derselben zu Maschinen. Mit Atlas. 1852. Nach dem Französischen des Le Blanc, von Carl Hartmann. *Illus.* 1852.

197. Handbuch der Photographie auf Metallplatten, Papier und Glass. Nebst Angabe der Erfindungen und der Darstellung der zur Photographie nöthigen Präparate. Nach dem Französischen des Vallcourt, Gros & Blanquart-Evrard, von Christ. Heinr. Schmidt. *Illus.* 1852.

Neuer Schauplatz—Continued.

198. Farbwaarenkunde und Farbenchemie für Färberei und Zeugdruck. Anweisung, Farbwaaren und Säuren, Alkalien, Salze, etc. zu prüfen, ihren nutzbaren Gehalt auszumitteln, und sie aus den besten Quellen zu beziehen. Christ. Heinr. Schmidt. *Illus.* 1852.

199. Wachs-Industrie und -Kunst. Technische und artistische Benutzung und Behandlung des Wachses. Nebst, Beschreibung berühmter Wachsfabriken und Wachsbleichereien; auch Fabrikation des Wachstuches und -papieres. Chr. Heinr. Schmidt. Mit Atlas. 1853.

200. Schleifen und Poliren der Werkzeuge und Instrumente, ferner auf Stahl, Eisen und anderen Metallen, sowie auf Steinen, Glas, Holz, Horn, Elfenbein etc. Anhang, über Graviren, Aetzen und Damasciren. Nach dem Englischen des Holtzapfel, von Carl Hartmann. *Illus.* 1853.

201. Gutta-Percha und Kautschuk. Ihr Vorkommen, Eigenschaften und Verarbeitung zu verschiedenen Gegenständen. Friedr. Harzer. Mit Atlas. 1853.

202. Fabrication der Portefeuilles, Etuis und Ledergalanteriewaaren. Nebst Anweisung zum Spalten, Färben, Glätten und Appretiren des Leders; Vergolden und Blindpressen der Stoffe; Fabrication des Reliefleders; Behandlung der Maschinen und Instrumente. Anhang, über den Einfluss der Portefeuilles Fabrication auf die Buchbinderei. A. Kirsch. Mit Atlas. 1853.

203. Erhaltung und Restauration der Gemälde. Elemente der Kunst des Restaurateurs; historische Angaben des mechanischen Theils der Malerkunst, Aufstellung aller Schulen; Nachrichten über einige grosse Meister. Horsin Déon. Deutsch von A. W. Hertel. 1853.

204. Haus- und Stubenmaler und Firmaschreiber. Aus dem Englischen von Emanuel Schreiber. 1853.

205. Papierfabrication, wie sie in England, Frankreich, Deutschland, Holland, Belgien und der Schweiz betrieben wird. Ergänzung aller Werke über Papierfabrication. Nach Gabriel Planche, von Dr. Carl Hartmann. Mit Atlas 1854.

206. Handbuch der Steinarbeiten. Kunst Steine und Schiefer zu gewinnen und mit der Hand und mit Maschinen zu bearbeiten. Anhang über künstliche Steinmassen. Carl Hartmann. *Illus.* 1854.

207. Kunst des Staffirmalers, Vergolders, Lackirers und Farbenfabricanten. 2te Aufl. Nach M. Watin und F. Bourgeois, von A. W. Hertel. 1854.

208–211. Orgelbaukunst, nach den besten Methoden und begründet auf mathematische und physikalische Gesetze. 1ster Theil: Orgeltheile, ihre Zusammensetzung; äusserer Aufbau in neuerem und älterem Baustyl; Verfertigung der Windladen. Anlage der Mechanik, der Bälge; Verfertigung und Aufstellung des

Digitized by Google

Neuer Schauplatz—Continued.

Pfeifwerks; Intonation und Stimmung. Construction expressiver Orgeln; Art alte Orgeln zu repariren, mit Stimmen vermehren. 2ter Theil: Theorie der Orgelbaukunst. Beschreibung der Erfindungen und Verbesserungen. J. G. Töpfer. 1855.

212. Feuerungs-, Erwärmungs- und Ventilations-Anlagen. Nebst Heizung mit Leuchtgas, Wasserstoffgas. Übersicht der üblichen Heiz- und Kochapparate. Ergänzung zu "Grundsätzen der Feuerungskunde". Nach E. Péclet, von Carl Hartmann. *Illus.* 1854.

213. Saffianfabrication in England, Frankreich und Deutschland. Auch Beschreibung der Geräthe, Werkzeuge und Maschinen. Chr. H. Schmidt. *Illus.* 1854.

214. Glockengiesserei, mit ihren Nebenarbeiten, nach ihrem jetzigen Zustande. Friedrich Harzer. *Illus.* 1854.

215. Branntweinbrennereibetrieb, besonders in Beziehung auf Spirituserzeugung aus Getreide, Kartoffeln, Runkelrüben und -melasse, mittelst Apparaten und Dampfmaschinen. Chr. Heinr. Schmidt. *Illus.* 1854.

216. Münzkunst. Medaillen-Prägen, Graviren und Stempelschneiden. Friedrich Harzer. Mit Atlas. 1855.

217. Weissgerberei. Fabrication des Riemer- und Zeugleders; des Ungarischen, Französischen, Brüsseler und Erlanger Leders. Sämisch- und Pergamentgerberei und Leimsiederei. Chr. Heinr. Schmidt. *Illus.* 1854.

218. Handbuch der Photographie auf Metallplatten, Papier und Glas. Angabe der neuesten Erfindungen und Darstellung der Präparate zur Photographie. Nach dem Französischen des Vallcourt, Gros und Andern, von Chr. Heinr. Schmidt. 2ter Theil. *Illus.* 1854.

219. Fabrication der künstlichen Blumen nebst der Federschmückerei. Em. Schreiber. Mit Atlas. 1855.

220. Handbuch der Buchdruckerkunst. Nach ihrem neuesten Standpunkte in Deutschland. C. A. Franke. 1855.

221. Runkelrüben-Branntweinbrennerei, als das sicherste Mittel für den Landwirth, wohlfeiles Fleisch und Brod, und wohlfeilen Dünger zu erzeugen. Nach dem Französischen des A. Payen, von Chr. Heinr. Schmidt. Mit Atlas. 1855.

222. Dreh- und Repetirpistolen, oder Revolvers, ihre Vergangenheit, Gegenwart und Zukunft, nebst den Grundsätzen über das Schiessen mit diesen Waffen. Nach dem Französischen des Anquetil, von Christ. Heinr. Schmidt. *Illus.* 1855.

223. Wasser-Mahlmühlen-Bau. Construction der Räderwerke und Gerinne, im Mühlenbau, mit besonderer Beziehung auf Wasser-Mahlmühlen. Lehre über das Messen der Wassermengen in Flüssen, Canälen und prismatischen Behältern. Adolf Lohmann. *Illus* 1856.

224. Stationäre und locomobile Dampfmaschinen und Dampfkessel, Beschreibung, Wartung, Reparatur und Führung derselben; Berechnung ihrer Leistungsfähigkeit. Friedrich Neumann. Mit Atlas. 1869.

225. Rothpapp- und Dampffarbendruck. Anweisung, baumwollene Stoffe in allen Farben zu färben und drucken; Angabe Tafelfarben anzufertigen. J. A. Diedtmann. 1855.

226. Rauchverzehrende Oefen. Beschreibung der Apparate und Mittel zur Verhinderung der Bildung und zur Beförderung der Verbrennung des Rauches. Ergänzung zur Péclet's "Feuerungskunde" und Grouvelle's "Dampfmaschinenkunde". Carl Hartmann. *Illus.* 1855.

227. Fabricant von Kautschuk- und Guttapercha-Waaren, Verfertigung wasserdichter Zeuge von Wachstuch und lackirtem Leder; auch Gegenstände aus künstlichem Gummi. Chr. Heinr. Schmidt. Mit Atlas. 1855.

228. Lehre von electrischen Telegraphen, ihrer Geschichte, Beschaffenheit, Einrichtung, den wichtigsten Arten und ihres Betriebes. Nebst Belehrung über Erregung, Leitung und Geschwindigkeit des electrischen Stromes. Nach Dionysius Lardner, von Carl Hartmann. Mit Atlas. 1856.

229. Anlegung der Blitzableiter zu sicherem Schutze. Nach Gay-Lussac und Pouillet von Christ. Heinr. Schmidt. Mit Atlas. 1856.

230. Verschiedene Substanzen welche zur Beleuchtung angewendet werden. Ihre Gewinnung, Zubereitung und ihr Nutzeffect. Chr. Heinrich Schmidt. Mit Atlas. 1856.

231. Waagen und ihre Construction. Nebst Anhang über die Gewichtssysteme verschiedener Länder und deren Vergleichung mit dem französischen metrischen Gewicht. Carl Hartmann. *Illus.* 1856.

232. Neueste Fortschritte in der Saftgewinnung aus Runkelrüben, für Zuckerfabrication und Branntweinbrennerei. Nebst Aufbewahrung der Runkelrübenrückstände in ihrem Futterwerth. Chr. H. Schmidt. *Illus.* 1856.

233. Brunnen-Ingenieur. Die Wissenschaft, nach leichtem und sicherm Systeme, an allen Oertlichkeiten, Brunnen anzulegen. Nach J. Dumas. Chr. Heinr. Schmidt. Mit Atlas. 1857.

234. Neue Erfindung in der Lohgerberei, oder der neuen Spar- und Schnellgerberei. Aus dem Französischen. Chr. Heinr. Schmidt. 1857.

235. Oelmalerei in umfassender, technischer Beziehung. Nach Lasalle und Thénot, von A. W. Hertel. Anhang: Uebersicht der Kunstgeschichte, der Malerschulen, und Restauration der Oelgemälde. *Illus.* 1857.

236. Flachs-, Hanf- und Wergspinner auf Maschinen. Nebst, Notizen über Flachs- und Hanfbau, über die Flachsröste, und die Vorbereitungsmaschinen dieser Gespinnstoffe. Aus dem Französischen, von Chr. Heinr. Schmidt. Mit Atlas. 1857.

237. Aufbereitung und Verkokung der Steinkohlen, Braunkohlen und Torfes. Bemerkungen

Digitized by Google

Neuer Schauplatz—Continued.

über Brennstoffe in dem Haushalte, der Landwirthschaft und den Gewerben. Carl Hartmann. Mit Atlas. 1858.

238. Taback, als wichtige Culturpflanze, und seine Verwendung zu Rauch-, Kau- und Schnupftaback, besonders zu Cigarren, nach den Verfahrungsarten in Havanna. Christ. Heinr. Schmidt. *Illus.* 1858.

239. Berechnung und Construction der Fässer von allen Formen. Nebst Unterweisung in Decimalbrüchen und Ausziehung der Quadratwurzeln. Ferdinand Seidler. *Illus.* 1858.

240. Construction und Fabrication der Schraubenbolzen, Ankerschrauben, Schraubenmuttern, Schraubenschlüssel, Unterlegscheiben, Stifte, Keile, Niete und Winkeleisen. Nach A. C. Benoît Duportail und Andern, von Em. Schreiber. Mit Atlas. 1858.

241. Puddel- und Walzmeister. Verpuddeln des Roheisens; Verarbeitung des Puddeleisens und Stahl zu Stabeisen, Eisenbahnschienen, Spurkranzeisen, zu Blech und Draht. Carl Fr. A. Hartmann. Mit Atlas. 1858, and 1861.

242. Verschönerungskunde von Glas-, Wand-, Plafond- und Metalloberflächen. Anhang, Litho- und Linophanien herzustellen. Emanuel Schreiber. *Illus.* 1858.

243–244. Das Maurerhandwerk in seinem ganzen Umfange. 1ster Theil: Lehre von der Lagerung, den chemisch-physikalischen Eigenschaften der Gebirgsarten und Gesteine. 2ter Theil: Form- und Verbindungslehre. Construction der Rüstungen; Baugründe und Fundamente; Verband der Mauern und deren statische Beziehungen; Freimauer. Nach Claudel und Laroque, von W. Hertel. *Illus.* 1858.

245. Seifenfabrikation. Vervollkommnungen in Deutschland, Frankreich, Belgien und England. Anlage der Einrichtungen einer Fabrik für marmorirte Seife. Plan einer Seifenfabrik mit Dampfheizung. Darstellung guter Kernseifen. Conr. Lichtenberg. *Illus.* 1858.

246. Darstellung der feinen Toiletseifen, nach den bis jetzt geheim gehaltenen Verfahrungsarten. Einrichtungen, Geräthschaften und Maschinen. Wilh. Ramberg. *Illus.* 1858.

247. Retouchiren und Coloriren der Photographien mit Farbenpulvern, Wasser- und Oelfarben, den Gesetzen der Harmonie und des Contrastes entsprechend. Nach William Crookes, von Ch. H. Schmidt. *Illus.* 1860.

248. Compendiöses Handbuch der Färberei wollener, seidener, baumwollener, leinener und hanfener Gewebe, sowie auch der Garne aus diesen Stoffen. Ch. H. Schmidt. 1860.

249. Handbuch der Stahlfabrikation. Erzeugung und Verarbeitung des Herd-, Puddel-, Cement- und Gussstahls, Stahlhütten-Processe von Bessemer, Chenot und Achatius. Carl Hartmann. *Illus.* 1860.

250. Chemische Farbenlehre für Maler und Techniker. Anleitung zur Prüfung der Malerfarben auf Aechtheit und Güte, sowie Rathgeber bei Farbenmischungen. Lindes. 1860.

251. Wäsch- und Rollmangen, Walzen- und Cylindermangen, oder Calandern, sowie hauswirthschaftliche Waschmaschinen, als auch Vorrichtungen für die Fabrikwäsche in Bleichereien, Färbereien. Conr. Falk. Mit Atlas. 1861.

252. Maschinenbauer. Beschreibung und Abbildung der Maschinenelemente. Nach Le Blanc, von Carl Hartmann. Mit Atlas. 3ter Bd. 1861.

253. Drechseln in Holz, Elfenbein, Perlmutter und Metall. Anhang über ornamentales Drehen und der Beschreibung mehrerer neuen Drehbänke. Nach dem Englischen, von Stephan Appenzeller und Francis Campin. *Illus.* 1861.

254. Fabrikation künstlicher Brenn-materialien, der Pariser Kohlen, Paras, Briquettes, Kohlensteine und Kohlenziegel, von Holz-, Holzkohlen- und Steinkohlenabfällen, mit Theer und andern Substanzen. Ernst Wangenheim. *Illus.* 1861.

255. Knopffabrikation. Verfahrungsweisen bei der Fabrikation der hölzernen und beinernen Knopfformen der übersponnenen Knöpfe und Bandknöpfe. Beschreibung der Maschinen, Apparate und Werkzeuge neuester Construction. Verbesserungen in der Befestigung der Knöpfe. Rud. Isensee. *Illus.* 1861.

256–258. Weberei als Handwerk, Kunst und Fabrikgewerbe. 1ster Band: Kunstweberei auf Handstühlen. 2ter Band: Mechanische Weberei nach englischer, französischer und deutscher Schule. 3ter Band: Geschäftsbetrieb der Weberei. Anhang: Calculationen, Kostenanschläge. Fr. Herm. Voigt. Mit Atlas. 1862.

259–260. Handbuch der Metallgiesserei. 1ster Theil: Eisengiesserei, oder Anweisung das Roheisen in Tiegel-Kupol- und Flammöfen umzuschmelzen, daraus in Sand-, Masse-, Lehm- und eisernen Formen durch Guss Gegenstände darzustellen, und dieselben durch Putzen, Anstreichen, Verkitten zu bearbeiten. 2ter Theil: Metallgiesserei im engern Sinne, Anweisung durch Giessen mit Messing, Bronce, Zink, Gegenstände des Lebens, der Gewerbe und Künste, ferner Glocken, Statuen und andere Bildwerke herzustellen. Anhang über Galvanoplastik. Carl Hartmann. Mit Atlas. 1863.

261. Metallwaaren-Industrie und ihre Betriebs-Einrichtungen. Giess-, Glüh- und Löthöfen, Giessformen, Metalllegirungen der Neuzeit. Ulr. Köstlin. *Illus.* 1863.

262. Grundlehren der Uhrmacherkunst. Jürgen Meyer. *Illus.* 1863.

263. Windmühlen. Ihr Bau und ihre Berechnung, mit Beschreibung brauchbarer Anlagen für Müllerei und Wasserförderung mit Pumpen und Wurfrädern. Friedr. Neumann. Mit Atlas. 1863.

Digitized by Google

Neuer Schauplatz—Continued.

264. Erfindungen und Fortschritte in der Farbenfabrikation, sowohl in Bezug auf Erd- und Oxydfarben, als auch Lackfarben und Farbstoffe aus Harnsäure, wie aus Steinkohlentheer zum Färben und Drucken der Gewebe. Ch. H. Schmidt. *Illus.* 1864.

265. Mahlmühlenbetrieb, Beschreibung von Mühleneinrichtungen, sowie einzelner Maschinen zur Fabrikation von Mehl, Gries, Graupen und Reis. Anlagen und neueste Constructionen. Nachweis der bezüglichen Literatur. Friedr. Neumann. Mit Atlas. 1863.

266. Mineraloele und Mineralöl-Lampen, Naturgeschichte und Eigenschaften von Photogen, Solaröl und Petroleum. Verschiedenheiten in Construktion, Lichtstärke und Oelverbrauch der Mineralöl-Lampen. Otto Buchner. *Illus.* 1863.

267. Buch der Fortschritte für Schlosser, Grob-, Zeug- und Messerschmiede, auch Feilenhauer. Verstählen des Schmiedeisens, Zusammenschweissen des Gussstahls mit Eisen. Härten verstählter und stählener Werkzeuge. R. Jasmund. 2te Aufl. Mit Atlas. 1863.

268. Schleifen, Poliren, Färben und Verzieren des Marmors und anderer Steinarten zu Monumenten, Säulen, Statuen. Darstellung des Stucco lustro, des Gyps und andern künstlichen Marmors. Mart. Weber. 1863.

269. Cemente. Ihre Bereitung aus Kalken, auch Anwendung zu baulichen, gewerblichen und landwirthschaftlichen Zwecken, auch zu Kunstgegenständen. H. Gerstenbergk. 1865.

270–271. Darstellung chemischer Produkte, umfassend alle für Industrie und Gewerbe wichtigen Körper der anorganischen Chemie. Angabe ihrer Eigenschaften und titrimetischer Prüfung auf ihre Reinheit und Güte. N. Grueger. Mit Atlas. 1864.

272. Handbuch der electro-magnetischen Telegraphie nach Morse'schem System. Clem. Pfeiffer. Mit Atlas. 1864.

273. Ultramarin-Fabrikation, Ihre Entstehung, Geschichte und Ausbildung. Angabe der Einrichtungen und Bereitungsarten. G. E. Lichtenberger. Mit Atlas. 1864.

274. Theorie und Praxis der Bierbrauerei. Rathgeber in allen Verlegenheiten und sonstigen in diesem Geschäfte vorkommenden Fällen. H. Creuzburg. 1865.

275. Erfahrungen beim Brennerei-Betriebe, mit bewährtgefundenen Hefemitteln. H. A. Fischer. 1866.

276. Handbüchlein für den Böttcher oder Küfer, enthaltend, Risse und Modelle, Berechnungen des Inhalts von Flächen und aller Arten Gefässe, Tabellen und Hohlmasse. A. Lange. 2te Aufl. *Illus.* 1866.

277. Metallwaaren-Industrie, und ihre Betriebs-Einrichtungen auf dem Höhepunkte jetziger Vervollkommnung. Alle Giess-, Glüh- und Löthöfen, Giessformen, Metallegirungen der Neuzeit. 2ter Theil. Ulr. Köstlin. Mit Atlas. 1865.

Neuer Schauplatz—Continued.

278. Holzbearbeitungs-Maschinen. Neueste Konstruktionen von Kreis-, Vertikal- und Bandsägen, Sägegattern, Fournier- und Spanschneidmaschinen. Andr. Gravenhorst. Mit Atlas. 1866.

279. Handbuch der Emailphotographie und der Phototypie. A. Martin. 1867.

280. Fortschritte in der Construction der Pumpen, Saugapparate, Brunnenanlagen, Wasserleitungen etc. Georg Hoelder. Mit Atlas. 1867.

281. Spinnerei-Industrie, oder Repertorium aller in der Wollen-, Baumwollen-, Jute-, Hanf-, Flachs- und Wergspinnerei gemachten Erfindungen, Neuerungen und Verbesserungen. Hermann Ramming. *Illus.* 1867.

282. Fabrikation des Lohgaren Leders in Deutschland, und deren Fortschritte und Vervollkommnungen. In zwei Abtheilungen. F. A. Günther. *Illus.* 1867.

283–284. Handbuch der Glasfabrikation nach allen ihren Haupt- und Nebenzweigen. In zwei Bänden. Dr. A. Graeger. 4te Aufl. Mit Atlas. 1868.

285. Brennmaterialien und Feuerungsanlagen für Fabrik, Gewerbe und Haus. Hermann Grothe. Mit Atlas. 1871.

286. Hydraulische Motoren. Bau und Anlage der wichtigsten von Wasser getriebenen Maschinen, mit Beschreibung und Berechnung von Turbinen, Wasserrädern und Wassersäulenmaschinen. Friedrich Neumann. *Illus.* 1868.

287. Atelier und Apparat des Photographen. Anleitung zur Kenntniss der Konstruction und Einrichtung der Glashäuser, der photographischen Arbeitslokalitäten und des Laboratoriums. Darstellung des gesammten optischen, chemischen und technischen Apparats. Prüfung der Leistungsfähigkeit der Apparate. Otto Buehler. 1869.

288. Baumwollen-Spinnerei in allen ihren Theilen. Beschreibung, Berechnung und Behandlung der neuesten Maschinen, nebst vielen nützlichen Winken und Tabellen. Benno Niess. Mit Atlas. 1869.

289. Licht und Feuer, oder Feuerzeugfabrikation. Nebst, Prüfung und Darstellung der hierbei angewandten Materialien, zur Bereitung der Zündpräparate. Vorschriften für Phosphor-, Antiphosphor- und phosphorfreie Zündhölzchen; Berücksichtigung der Krankheiten in den Phosphorzündholzfabriken. Heinr. Wagner. *Illus.* 1869.

Neueste Erfindungen und Erfahrungen auf den Gebieten der praktischen Technik, der Gewerbe, Industrie, Chemie, der Land- und Hauswirthschaft. Hrsg. und red. von Dr. Theodor Koller. Erster B. Mit Illustrationen und Sachregister. 8°. *Regensburg*, 1874–75. [Continued from 'Der praktische Teckniker der Neuzeit'.]

Neuman, Henry, and **Baretti,** Joseph. A pronouncing dictionary of the Spanish

Digitized by Google

Neuman and Baretti—Continued.
and English languages. By Mariano Velasquez de la Cadena. 8°. *New York*, 1852.

Neumann, —. Art de construire et de gouverner les serres. *Illus.* l. 8°. *Paris*, 1846.

Neumann, Friedrich. Hydraulische Motoren: Turbinen, Wasserrädern und Wassersäulen-Maschinen. 8°. *Weimar*, 1868. **286 Neuer Schauplatz der Künste.**

—— Jahrbuch über die Erfindungen und Fortschritte auf dem Gebiete der Maschinentechnik und mechanischen Technologie; hrsg. von. Jahrg. 1.-4. *Illus.* 8°. *Halle a. S.*, 1873-76——.

—— Kalk, Gyps und Cement. *See* **Böhmer, Emil, and Neumann, Friedrich. 28 Neuer Schauplatz der Künste.**

—— Die stationären und locomobilen Dampfmaschinen und Dampfkessel. Beschreibung, Wartung, Reparatur und Führung derselben, sowie Berechnung ihrer Leistungsfähigkeit, bearbeitet von. *Illus.* sm. 8°. *Weimar*, 1869. **224 Neuer Schauplatz der Künste.**

Neumayer, *Prof.* Catalogue of the Victorian exhibition, 1861. *See* **Archer**, W. H.

NEUROPTERA, Synopsis of North American. By H. Hagen. **Smiths'n misc. coll., v. 3.**

NEUTRALITY act: Report of the case of the steamship Meteor. *See* **Balch**, F. V.

NEVADA, Southern and southeastern. Preliminary report. By Geo. M. Wheeler. *See* UNITED STATES. **War dept. Bureau** of engineers.

Neville, John. Fall necessary in the cross sections of roads. *See* **Weale's papers on engineering, v. 3.**

Nevins, J. Birkbeck. Translation of the new London pharmacopœia, etc. *See* **London** pharmacopœia.

NEVKA, Iron bridge across the. **Weale's papers on engineering, v. 3.**

New and complete American encyclopædia, or universal dictionary of arts and sciences. From the Encyclopædia Perthensis, with improvements. 7 v. *Illus.* 4°. *New York*, 1805-11.

—— and complete Canary bird fancier: containing a variety of useful information in their management while breeding, and their treatment when diseased; with a few useful hints to the breeder of mules. By a fancier. 6th Amer. ed. 18°. *New York*, 1839. pp. 40.

NEW BEDFORD (Mass.). Free public library. Annual reports of the trustees, 4th and 5th. 8°. *New Bedford*, 1856-57.

—— —— Proceedings upon the occasion of laying the corner stone of the edifice. 8°. *New Bedford*, 1856.

NEW BRUNSWICK, Digest of the patent laws of. *See* **Stubs**, P.

New (A) dictionary of quotations from the Greek, Latin and modern languages. Translated into English, and occasionally accompanied with illustrations, historical, poetical and anecdotical; with an extensive index referring to every important word. By the author of 'Live and learn,' etc. From the last London ed. 8°. *Philadelphia*, 1864.

New England car spring company. A. G. Phelps and others, adm's, and C. Goodyear. Motion for a preliminary injunction. *See* **Phelps**, A. G.

—— History of. *See* **Coolidge**, Austin J., and **Mansfield**, J. B.

—— Insects of, injurious to vegetation. *See* **Harris**, T. W.

—— poultry breeder; a brief history of domestic fowls, and directions for their rearing and management. By a practical poulterer. 18°. *Boston*, 1850.

NEW HAMPSHIRE. History of New England. *See* **Coolidge**, Austin J., and **Mansfield**, J. B.

NEW JERSEY R. R. and transportation co. Report of the directors. *See* **Jackson**, J. R.

New Jerusalem and its heavenly doctrine. *See* **Swedenborg**, Emanuel.

New (The) London mechanics' register, and magazine of science and the useful arts: embracing exclusive and authentic reports of the lectures delived at the London mechanics' institution. By the most eminent professors. *Illus.* v. 2. 8°. *London*, 1828. [Continuation of 'London Mechanics' Register', which see.]

NEW MEXICO, Coleoptera of eastern. By J. L. Le Conte. **Smiths'n contrib, v. 11.**

—— Plantæ Wrightianæ Texano-N. Mexicanæ. By A. S. Gray. **Smiths'n contrib., v. 3, 5.**

Digitized by Google

NEW ORLEANS and Lafayette directory, Cohen's, Gardner's, etc. 8°. *New Orleans*, 1849–57.

——— Edwards' annual directory to the inhabitants, institutions, incorporated companies, manufacturing establishments, business, business firms, etc., in the city of New Orleans for 1871. 8°. *New Orleans*, 1871.

——— Mechanics' and agricultural fair association of Louisiana, incorporated April, 1860. Charter and by-laws. 16°. *New Orleans*, 1860. pp. 20.

New (A) pocket dictionary of the English and Russian languages. Karl Tauchnitz edition. 16°. *Leipzic*, 1874.

——— (A) pocket dictionary of the English and Swedish languages. Karl Tauchnitz edition. 16°. *Leipzic*, 1872.

——— remedies. *See* **Hoyne**, Temple S.

NEW SOUTH WALES. The mother colony of the Australias. *See* **Reid**, G. H.

New testament, A grammar of the idiom of the. *See* **Winer**, George Benedict.

NEW YORK (city). American Institute. Annual reports to the legislature. 1849–64, 1866–68, 1870–71. 8°. *Albany*, 1849–71.

——— ——— Journal of, devoted to the interests of agriculture, commerce, manufactures and the arts. Ed. by a committee of the institute. v. 1–4. 8°. *New York*, 1836–40.

——— Astor library. Catalogue. v. 1–4. 8°. *New York*, 1857–59. [Bound in 2 v.]

——— ——— Report of the trustees. Transmitted to the legislature, Feb. 1, 1861. 8°. *Albany*, 1861. pp. 21.

——— Central Park. Annual reports of commissioners, 1st to 13th. 13 v. 8°. *New York*, 1857–70.

——— Chamber of commerce, Colonial records of, 1768–1784. *See* **Stevens**, John Austin, *jr.*

——— Coachmaker's magazine, devoted to the literary, social, and mechanical interests of the craft. Ed. by E. M. Stratton. v. 1–11. 4°. *New York*, 1859-70.

——— Columbia college. School of mines. Catalogue of books and pamphlets in the library, July 1, 1875. 8°. *New York*, 1875.

——— Common council. Report of special committee relative to the catastrophe in Hague street, Feb. 4, 1850. 8°. *New York*, 1850.

NEW YORK (city). Croton and steam faucet manufacturing co. Specimen drawings. 4°. *New York, n. d.*

——— Crystal palace. Art and industry at the Crystal palace, 1853–54. *See* **Greeley**, Horace.

——— ——— A day in. *See* **Richards**, W. C.

——— ——— Description of the building. *See* **Carstensen**, G., and **Gildemeister**, C.

——— directory, Doggett's, for 1842–50. 8°. *New York*, 1842–50.

——— directory, Trow's, 1856–76. *See* **Wilson**, H.

——— farmer and mechanic. v. 1. large fol. *New York*, 1845. *n. t. p.*

——— Industrial exhibition of 1853. *See* **Science** and mechanism.

——— ——— *See* **World** of science, art and industry.

——— ——— The Fresnel lens, or diacatoptric illuminating apparatus for lighthouses. [Reprinted from Illustrated record of the exhibition.] *n. t. p.*

——— ——— Industry of the United States illustrated in. *See* **Whitworth**, J., and **Wallis**, G.

——— ——— Official catalogue of. *See* **Richards**, W. C.

——— ——— Official report of jury D. Machinery and civil engineering contrivances. 8°. *New York*, 1854. pp. 20.

——— ——— Special report. *See* **Whitworth**, J.

——— Mercantile library association. Annual reports of the board of direction. Nos. 29, 33, 34, 35, 37, 39, 52, 54, 55. 8°. *New York*, 1850–76——.

——— Meteorological observatory in the Central park. Report of the director for 1873. 8°. *New York*, 1874.

NEW YORK (state), Aboriginal monuments of. By E. G. Squier. **Smiths'n contrib., v. 2.**

——— Agricultural society. Transactions for 1869. v. 29. 8°. *Albany*, 1870.

——— ——— Trial of implements at Geneva, July, 1852. 8°. *Albany*, 1852. pp. 44.

——— ——— Trial of plows at Utica, Sept., 1867. 8°. *Albany*, 1868.

——— Business directory; containing names, business, and address of all merchants, manufacturers and professional men, throughout the state; also lists of insurance, railroad and manufacturing com-

Digitized by Google

NEW YORK (state)—Continued.
panies, banks, etc., 1859, 1864. 8°. *New York*, 1859–64.
—— Canals. Annual report of the canal commissioners. 8°. *Albany*, 1858. Also report for 1859. 8°. *Albany*, 1860.
—— —— Annual report of the state engineer and surveyor for 1851. 8°. *Albany*, 1852. Also for 1857. 8°. *Albany*, 1858.
—— Census for 1855. fol. *Albany*, 1857. Also for 1865. *Albany*, 1867.
—— Documentary history of. By E. B. O'Callaghan, under direction of Hon. Christopher Morgan. v. 2, 3. 8°. *Albany*, 1849.
—— Geological survey. Flora of the state of New York: comprising full descriptions of all the indigenous and naturalized plants hitherto discovered in the state, with remarks on their economical and medicinal properties. By John Torrey. 2 v. 4°. *Albany*, 1843.
—— Quarantine station, Report of commissioners relative to removal of. 8°. *Albany*, 1858. Also, another report, 1858.
—— Railroads. Annual report of the railroad commissioners of the state of New York, and of the railroad corporations, made to the board, for 1855, 1856. 4 v. 8°. *Albany*, 1856–57.
—— —— Reports of the state engineer and surveyor for 1854, 1857. 2 v. 8°. *Albany*, 1856–58.
—— Society for promotion of agriculture, arts, and manufactures. Transactions. v. 1–4. [v. 2–4 entitled 'for the promotion of useful arts'.] 2d ed. 8°. *Albany*, 1801–16.
—— State library. Annual report of trustees. 8°. *Albany*, 1856–65.
—— —— Catalogue for 1855. v. 1. General library. 2. Law library. 3. Maps, manuscripts, engravings, coins, etc. 8°. Supplements. General library, 1861. Law library, 1865. *Albany*, 1856–65.
—— —— Catalogue of books on bibliography, typography and engraving. 8°. *Albany*, 1858.
—— State prisons. Annual reports of the inspectors. 8°. *Albany*, 1858.
—— University. Annual reports of the regents, 51st–78th. 8°. *Albany*, 1838–65. [Imperfect.]
—— —— Annual report of the regents on the condition of the state cabinet of natural history. With catalogues of the
NEW YORK (state)—Continued.
same. 1st–17th. [Bound in 5 v. The later reports contain the condition of the historical and antiquarian collection.] 8°. *Albany*, 1848–63.
—— Volunteers. Reports of special committees appointed to make suitable arrangements for bringing on from Mexico the bodies of the officers of the New York regiment of volunteers. 8°. *New York*, 1850.
NEW ZEALAND. Specifications of invention in respect to which letters patent or letters of registration have been applied for. v. 1, 1861–73. v. 2, with plates, 1874. v. 3, 1875. fol. *Wellington*, 1874–76.
Newald, Johann. Forstwirthschaft. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**
—— **Haas,** Carl, and **Cohn,** Carl. Waffen. Metallwaaren. Beleuchtungs-Apparate. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**
Newman, James. The principles and practice of harmonious colouring in oil, water and photographic colours, especially as applied to photographs on paper, glass and silver plate. 2d ed. 8°. *London*, 1859.
Newman, John P. The thrones and palaces of Babylon and Nineveh; from sea to sea, a thousand miles on horseback. *Illus.* 8°. *New York*, 1876.
Newmarch, William. Statistics by G. R. Porter; rev. by. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.
NEWSPAPERS, Account of. *See* **Thomas,** J. **History** of printing in America.
—— advertising, etc. *See* **Men** who advertise.
—— London catalogue of. *See* LONDON.
—— Pettengill's newspaper directory for 1877. *See* **Pettengill,** S. M.
Newth, Samuel. Die wichtigsten Lehren der Statik, Dynamik und Hydrostatik, erläutert durch die bekanntesten Maschinen. Nebst einem Anhange über einige Gesetze des Lichtes und des Schalles. Allgemein fasslich vorgetragen von. Deutsch von Carl Hartmann. *Illus.* 8°. *Weimar*, 1851. **190 Neuer Schauplatz der Künste.**
Newton, Alfred Vincent. The operation of the patent laws, with suggestions for

Digitized by Google

Newton, Alfred Vincent—Continued.
their better administration. 8°. *London*, 1864. pp. 31.

Newton, C. Book of trades. *See* **Whittock,** N., and others.

Newton, Calvin, and **Calkins,** Marshall. Thoracic diseases; their pathology, diagnosis and treatment: with a biographical sketch of Prof. Newton. 8°. *Worcester*, 1854.

Newton, H. A. The metric system of weights and measures. Prepared to accompany Eaton's Grammar school arithmetic. 12°. *Boston*, 1867.

Newton, *Sir* Isaac. Opticks; a treatise of the reflexions, refractions, inflexions, and colours of light; also two treatises of the species and magnitude of curvilinear figures. 4°. *London*, 1704.

——— Philosophiae naturalis principia mathematica, auctore Isaaco Newtono, Eq. aurato, perpetuis commentariis illustrata, communi studio P. P. Thomae Le Seur. et Francisci Jacquier. 3 v. 8°. *Glasguæ*, 1822.

——— Principia; the mathematical principles of natural philosophy. Also System of the world. Transl. into English by A. Motte. Life of author by N. W. Chittenden. 8°. *New York*, 1848.

——— Universal arithmetic, or a treatise of arithmetical composition and resolution, to which is added Dr. Halley's method of finding the roots of equations arithmetically. Written in Latin and transl. by Ralphson. Rev. by Cunn. 2d ed. 8°. *London*, 1728.

——— Analytical view of the principia of. *See* **Brougham,** H., and **Routh,** E. J.

——— Treatise on the optics of. By D. Lardner. *See* LONDON. **Society of useful knowledge, v. 2.**

Newton, William. Letters and suggestions upon the amendment of the laws relative to patents for inventions: being a series of communications originally published in the London journal of arts and sciences; ed. by W. Newton; together with papers and documents, connected with the reform of the patent law. [Appended is an index of patentees.] 8°. *London*, 1835.

——— London journal of arts and sciences; ed. by. *See* LONDON journal.

Newton, William Edward. Notes of the cause between W. E. Newton and the Grand Junction railway company for an infringement of letters patent for improvements in the construction of boxes for the axletrees of locomotive engines and carriages, and for the bearings or journals of machinery in general; and also for improvements in oiling or lubricating the same. 8°. *London*, 1845.

——— Notes of the hearing and judgment of the cause between W. E. Newton and the Grand Junction railway company for an infringement of letters patent for improvements in the construction of boxes for the axletrees of locomotive engines and carriages, and for the bearings or journals of machinery in general; and also for improvements in oiling or lubricating the same; in the court of exchequer, Westminster, Lord Chief Baron Pollock, Baron Alderson, and Baron Rolfe sitting in banco. Jan. 29, 1846. 8°. *London*, 1846.

NIAGARA suspension bridge. Die Niagara Hängebrücke. *See* **Klein,** L. von.

Niccol, Robert. Essay on sugar, and general treatise on sugar refining, as practised in the Clyde refineries, embracing the latest improvements. 4°. *London and Edinburgh*, 1865.

Nichol, J. P. A cyclopædia of the physical sciences. *Illus.* 2d ed. 8°. *London and Glasgow*, 1860.

——— Physical atlas. *See* **Johnston,** A. K.

——— The planet Neptune; an exposition and history. 8°. *Edinburgh and London*, 1858.

——— Thoughts on some important points relating to the system of the world. 8°. *Edinburgh and London*, 1858.

Nicholls, W. A. The national drawing master, on a new principle; also the perspective of nature, and rules for sketching from nature. 2d ed. roy. 8°. *London, n. d.*

Nichols, W. R. Annual of scientific discovery; ed. by. *See* **Wells,** David A.

Nicholson, Elizabeth. What I know; or hints on the daily duties of a housekeeper; comprising nearly five hundred receipts for cooking, preserving, pickling, washing, ironing, gardening, etc. 8°. *Philadelphia*, 1856.

Nicholson, Henry D. The organ manual, for the use of amateurs and church committees. 12°. *Boston*, 1866.

Digitized by Google

Nicholson, James B. A manual of the art of book-binding. 8°. *Philadelphia,* 1856.

Nicholson, John. The operative mechanic, and British machinist; being a practical display of the manufactories and mechanical arts of the united kingdom. 2d ed. 8°. *London,* 1835.

Nicholson, Peter. An architectural and engineering dictionary. Containing a correct nomenclature and derivation of the terms; the sciences necessary to be understood; and the lives of the principal architects. 2 v. 4°. *London,* 1835.

——— The carpenter's new guide; a complete book for lines for carpentry, and joinery, treating on practical geometry, soffits, groins, niches, roofs, domes, etc. Rev. by N. K. Davis. Designs by S. Sloan. 16th ed. 4°. *Philadelphia,* 1854.

——— Carpentry: a comprehensive guide for carpentry and joinery. *Illus.* 2 v. 4°. *London,* 1848-50.

——— The mechanic's companion; or elements and practice of carpentry, joinery, bricklaying, masonry, slating, plastering, painting, smithing, and turning; an explanation of terms used in each art: also an introduction to practical geometry. *Illus.* 8°. *Philadelphia,* 1845.

——— The new and improved practical builder, and workman's companion. Rev. by Thomas Tredgold. *Illus.* 3 v. 4°. *London,* 1847. [v. 3 missing.]

——— A treatise on practical perspective, without the use of vanishing points; an application of the centro-lineal to perspective, with a description of the instrument. 8°. *London,* 1815.

Nicholson, William. The British encyclopædia, or dictionary of arts and sciences; comprising an accurate view of the present improved state of human knowledge. Illustrated by Lowry and Scott. 6 v. 8°. *London,* 1809. [2 copies.]

——— A journal of natural philosophy, chemistry and the arts. 1st series, v. 1-5, 1797-1802. 2d series, v. 1-35, 1802-1813. [Bound in 14 v. v. 21-24, 28-30, missing.] 1st series, 4°. 2d series, 8°. *London,* 1797-1813.

NICKEL plating. Die Kunst des Vergoldens, Vernickelns, etc. *See* **Schmidt,** Christian Heinrich. **133 Neuer Schauplatz der Künste.**

Nicklès, J. Annuaire de chimie. *See* **Millon,** E., and **Reiset,** J.

Nicolas, Nicholas Harris. The chronology of history, containing tables, calculations and statements. 16°. *London.* **Lardner's cabinet cyclopædia, v. 2.**

Nicolson, Samuel. In the matter of the application of George T. Bigelow, administrator of the estate of Samuel Nicolson, deceased, for the renewal and extension of the patent granted to said Samuel Nicolson, Aug. 8, 1854, and reissued Aug. 20, 1857. Depositions, etc. 8°. *Chicago,* 1867. [†]

NICOLSON pavement, The. *See* **Johnson,** Frank G.

——— ——— co. vs. Charles E. Jenkins. Transcript of record. Supreme court of the United States. December term, 1871. *n. t. p.*

Niedermayr, J. Wirthschaftliche Reisenotizen. 8°. *Augsburg,* 1861.

Niepce de Saint Victor, Claude Marie François. Méthodes photographiques; la coloration des épreuves. *See* **Chevalier,** Charles.

——— Recherches photographiques. Photographie sur verre. Héliochromie, gravure héliographique, notes et procédés divers. Suivi de considérations par M. E. Chevreul, avec une préface biographique et des notes par M. Ernest Lacan. 8°. *Paris,* 1855.

Niernsee, John R. Report on the construction and embellishment of private dwellings in Vienna. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 4.**

Niess, Benno. Die Baumwollen-Spinnerei in allen ihren Theilen, enthaltend die Beschreibung, Berechnung und Behandlung der neuesten Maschinen, ihre Stellung für die verschiedenen Baumwollen, nebst vielen nützlichen Winken und originalen Tabellen. Mit einem Vorworte von Max Hausschild. Nebst einem Atlas. *Illus.* 8°. *Weimar,* 1869. **288 Neuer Schauplatz der Künste.**

——— Der Führer des Baumwollenspinners in den Grundsätzen der Manipulation und den wichtigsten Daten aus dem Gebiete der Arithmetik, Geometrie und Mechanik. 16°. *Weimar,* 1871.

NINEVEH court in the Crystal palace. *See* **Layard,** A. H. **Crystal palace library, v. 1.**

Digitized by Google

NIPPON. Archiv zur Beschreibung von Japan. *See* **Siebold**, Ph. Fr. von.

Nisbet, Andrew. Digestion and the teeth. The importance to health of restoring the power of masticating the food. 8°. *Glasgow*, 1857.

NITRE, On the explosiveness of. By R. Hare. **Smiths'n contrib., v. 2.**

NITROUS oxide, Medical properties and applications of. *See* **Ziegler**, George J.

—— vapour: its effect in preventing and destroying contagion. *See* **Smyth**, James Carmichael.

Noad, Henry M. The inductorium, or induction coil; an explanation of the electrical principles on which it is constructed: with the description of a series of beautiful and instructive experiments, illustrative of the phenomena of the induced current. 2d ed. 16°. *London*, 1866.

—— Lectures on chemistry; its application to the arts; and the analysis of organic and inorganic compounds. *Illus.* 8°. *London*, 1843.

—— Lectures on electricity, comprising galvanism, magnetism, electro-magnetism, and thermo-electricity. New ed. *Illus.* 8°. *London*, 1844.

—— A manual of chemical analysis, qualitative and quantitative. 12°. *London*, 1864.

—— A manual of electricity; including galvanism, magnetism, diamagnetism, electro-dynamics, magneto-electricity, and the electro-telegraph. Part 2. [Part 1 missing.] 4th ed. *Illus.* 8°. *London*, 1857. Another ed., 1859.

Noback, Gustav, and **Schmidt,** Ed. Bier, Malz, etc. Gegohrene Flüssigkeiten. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

Noble, John Henry. Progress of civil and and mechanical engineering. *See* **Smith**, William, **Noble**, John Henry, and **Smith**, Thomas.

Noble, W. H. Useful tables, compiled by. 32°. *London*, 1875.

Nodot, L. Description d'un nouveau genre d'édenté fossile, renfermant plusieurs espèces voisines du glyptodon; publiée par l'Académie des sciences, arts et belles-lettres de Dijon. *Illus.* pp. 4, pl. 12. *n. t. p.*

Noeggerath, J. Bericht über die Versammlung deutscher Naturforscher und Aerzte; hrsg. v. *See* **Versammlung** deutscher Naturforscher, etc.

Noeggerath, J.—Continued.

Noël, François J., and **Carpentier,** L. J. M. Nouveau dictionnaire des origines, inventions et découvertes dans les arts, les sciences, la géographie, le commerce, l'agriculture, etc.; corrigé et augmenté en Belgique d'un supplément et de notes intéressantes, par une société de savants et de gens de lettres. T. 1, 2. 8°. *Bruxelles*, 1828.

Nogent, *Vicomte* de. Littérature et beaux-arts. *See* **Écho** de la littérature.

Noisette, —, and **Boitard,** Pierre. Manuel du jardinier des primeurs. *Illus.* 18°. *Paris*, 1832. **94 Manuels Roret.**

Nollet, Jean Antoine. Art de faire des chapeaux, par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 29, also v. 7.**

—— L'art des expériences; avis aux amateurs de la physique sur le choix, la construction et l'usage des instruments; sur la préparation et l'emploi des drogues qui servent aux expériences. T. 1–3. 2e éd. 12°. *Paris*, 1770.

NON-OFFICINAL formulæ in local use in the District of Columbia. *See* **Medical** and pharmaceutical associations.

Norcross, Nicholas G. Case of Brooks et al. vs. Fiske and Norcross. *See* **Brooks**, A. L., and others.

Nördling, Wilhelm von. Stimmen über schmalspurige Eisenbahnen. roy. 8°. *Wien*, 1871.

Nördlinger, H. Die Kenntniss der wichtigsten kleinen Feinde der Landwirthschaft. 12°. *Stuttgart*, 1871.

—— Die technischen Eigenschaften der Hölzer. 8°. *Stuttgart*, 1860.

Norman, John Paxton. A treatise on the law and practice relating to letters patent for inventions. 8°. *London*, 1853.

NORMAN-French, A dictionary of. *See* **Kelham**, Robert.

—— —— language, Dictionary of the. By R. Kelham. *See* **Bouvier**, J. **Law** dictionary.

Normandin, —. Handbuch der Frisirkunst. *See* **Villaret** and **Normandin. 42 Neuer Schauplatz der Künste.**

Normandy, A. The commercial handbook of chemical analysis: instructions for the determination of the intrinsic or

Digitized by Google

Normandy, A.—Continued.
commercial value of substances used in manufactures, trades and the arts. 8°. *London*, 1850.

——— Treatise on chemical analysis; transl. by. *See* **Rose,** H.

NORMANDY, Architectural antiquities of. *See* **Britton,** J., and **Pugin,** A.

Norris, Thaddeus. The American angler's book: natural history of sporting fish, and art of taking them; instructions in fly-fishing, fly-making, and rod-making: directions for fish-breeding. To which is added, 'Dies piscatoriae' describing noted fishing places, etc. Supplement: containing description of salmon rivers, inland trout fishing, etc., etc. *Illus.* 8°. *Philadelphia, London*, 1865.

——— American fish-culture: embracing the details of artificial breeding and rearing of trout; the culture of salmon, shad and other fishes. 12°. *Philadelphia, London*, 1868.

NORTH AMERICA, Catalogue and synopsis of lepidoptera of. By J. G. Morris. **Smiths'n misc. coll., v. 3, 4.**

——— Catalogue of birds of, in the Smithsonian institution. By S. F. Baird. **Smiths'n misc. coll., v. 2.**

——— Catalogue of diptera of. By R. Osten Sacken. **Smith'n misc. coll., v. 3.**

——— Catalogue of serpents of. By S. F. Baird and C. Girard. **Smiths'n misc. coll., v. 2.**

——— Class of the coleoptera of. By J. L. LeConte. **Smiths'n misc. coll., v. 3.**

——— Collecting nests and eggs of birds of. **Smiths'n misc. coll., v. 2.**

——— Collecting shells of. **Smiths'n misc. coll., v. 2.**

——— Collection de monnaies et médailles de l'Amérique du Nord de 1652 à 1858. *See* **Vattemare,** A.

——— Eisenbahnwesen in Nord Amerika. *See* **Henz.**

——— History of grasshoppers of. **Smiths'n misc. coll., v. 2.**

——— Lists of the shells of. By I. Lea and others. **Smiths'n misc. coll., v. 2.**

——— Synopsis of neuroptera of. By H. Hagen. **Smiths'n misc. coll., v. 4.**

North American botany. *See* **Eaton,** Amos, and **Wright,** John.

North (The) American review. v. 1–124. [v. 1–12 called 'and miscellaneous journal'. v. 10 began new series. New numbering ceased with v. 30.] 8°. *Boston*, 1815-77 ——.

——— (The) British review. American ed. v. 13–60. [2 v., or each year, bound in 1 v. v. 44–45, 1866, missing.] 8°. *New York*, 1850–74.

——— country words, A glossary of. *See* **Brockett,** John T.

NORTH CAROLINA. History of the line betwixt North Carolina and Virginia. *See* **Byrd,** W.

——— sea canal of Holland, Report on, by J. G. Barnard. *See* UNITED STATES. **War department.**

NORTHAMPTONSHIRE words and phrases. *See* **Baker,** Anne Elizabeth.

Northcott, W. Henry. A treatise on lathes and turning. 8°. *London*, 1868.

Northend, Charles. The teacher and the parent: a treatise upon common school education; containing practical suggestions to teachers and parents. 8th ed. 8°. *New York*, 1867.

Norton, Charles B. American breech-loading small arms: a description of late inventions, including the Gatling gun, and a chapter on cartridges. 4°. *New York*, 1872.

——— Literary register, or annual book list, for 1856. A catalogue of books, including new editions and reprints published in the United States during the year 1855; containing titles, number of pages, prices, and names of publishers, with an index of subjects. 8°. *New York*, 1856.

——— and **Valentine,** W. J. Munitions of war exhibited at the Paris exposition, 1867. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Norton, John P. Notes for American farmers. 8°. *New York*, 1851.

Norton, William A. A treatise on astronomy, spherical and physical, with astronomical problems, and solar, lunar, and other astronomical tables. 4th ed. 8°. *New York*, 1867.

NORWAY, Fauna of. Om de i Norge forekommende fossile Dyrelevninger fra qvartaerperioden. *See* **Sars,** Michael.

——— Flora of. Die Pflanzenwelt Norwegens. *See* **Schübeler,** F. C.

Digitized by Google

NORWAY, History of Denmark, Sweden and. *See* **Dunham**, S. Astley. **Lardner's cabinet cyclopædia, v. 57-59.**

——— Indstilling fra den ved kongelig resolution af 23de Janr. 1873 nedsatte kommission angaaende lovgivningen om Maal og Vaegt. Afgiven den 11te September 1873, af Dr. O. I. Broch. 16°. *Kristiania*, 1873.

——— Kong Christian den fjerdes Norske lovbog af 1604. Efter foranstaltning af det akademiske kollegium ved det kongelige Norske Frederiks Universitet. Udgeven af Fr. Hallager og Fr. Brandt. Universitets-program for andet halvaar 1855. 8°. *Christiania*, 1855.

——— Meteorology of. Windrosen des südlichen Norwegens. *See* **Seue**, C. de.

——— Saga om Kong Olaf den hellige. *See* **Sturlasson**, Snorre.

Nosban, —. Manuel du menuisier en meubles et en bâtimens, suivi de l'art de l'ébéniste; contenant les principes du dessin géométrique et des projections, exposés d'après la méthode de M. Francœur. T. 1, 2. *Illus.* 18°. *Paris*, 1835. **47 Manuels Roret.**

Nostitz, *Comte* de. Méthodes photographiques; procédé sur collodion. *See* **Chevalier**, C.

NOTATION representing the sounds of alphabetical characters. *See* **Pelham**, William.

Notcutt, W. L. A handbook of the microscope, and microscopic objects; with descriptive lists of upward of 1780 objects, and directions for obtaining, preparing and viewing them. 16°. *London*, 1859.

Notes and queries: a medium of intercommunication for literary men, artists, antiquaries, genealogists, etc. 1st series, v. 1-12, 1849-55. 2d series, v. 1-12, 1856-61. 3d series, v. 1-12, 1862-67. 4th series, v. 1-12, 1868-73. 5th series, v. 1-7, 1874-77. sm. 4°. *London*, 1850-77——.

——— and queries. General index to 1st series. Compiled by J. Yeowell. sm. 4°. *London*, 1856.

——— sur l'élevage du bétail, des espèces bovine, ovine et porcine de l'empire d'Autriche. 8°. *Paris*, 1856.

Nothomb, —. Travaux publics en Belgique, 1830-1839. Chemins de fer et routes ordinaires. *See* BELGIUM.

Nott, J. C., and **Gliddon**, George R. Indigenous races of the earth; or, new chapters of ethnological enquiry; including monographs on special departments of philology, iconography, cranioscopy, palæontology, pathology, archæology, comparative geography, and natural history, contributed by Alfred Maury, Francis Pulszky, and J. Aitken Meigs, with communications from Joseph Leidy and L. Agassiz. 4°. *Philadelphia*, 1857.

Nott, J. C., and **Gliddon**, G. R.—Continued.

——— ——— Types of mankind, or ethnological researches, based upon the ancient monuments, paintings, sculptures, and crania of races, and upon their natural, geographical, philological and Biblical history. Illustrated from papers of Samuel George Morton, and by contributions from L. Agassiz, W. Usher, and H. S. Patterson. 4°. *Philadelphia*, 1854.

Nourse, B. F. Report upon cotton. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 6.**

Nourse, Mason and co., Descriptive and illustrated catalogue of plows and other agricultural and horticultural implements and machines manufactured and sold by. 8°. *Worcester*, 1860. [2 copies.]

Nouveau manuel du bouvier et du zoophile, ou l'art d'élever et de soigner les animaux domestiques. 18°. *Paris*, 1836. **97 Manuels Roret.**

Nouveaux cours complet d'agriculture théorique et pratique, ou dictionnaire raisonné et universel d'agriculture; ouvrage rédigé sur le plan de celui de feu l'abbé Rozier. Par les membres de la section d'agriculture de l'Institut de France, etc. Avec des figures en taille-douce. Nouv. éd. T. 1-16. 8°. *Paris*, 1821-22.

Nouvelles annales d'agriculture, par C. A. Oppermann. Revue des fermes impériales. Organe de la Compagnie des constructions rurales économiques; de la Compagnie générale du drainage, et de la Société d'acclimatation. T. 1-8. fol. *Paris*, 1859-66.

NOVA SCOTIA, Geological observations on. *See* **Lyell**, Charles.

Novelly, Victor. Kesselarmaturen, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

Novelties, inventions and curiosities in arts and manufactures. 3d ed. 16°. *London*, 1853.

NOVUM organum. *See* **Bacon**, Francis.

Digitized by Google

Nowotny, F. Civilingenieur; hrsg. von. *See* **Civilingenieur.**

Nugent, E. A treatise on optics; or light and sight, theoretically and practically treated, with the application to fine arts and industrial pursuits. 16°. *New York,* 1868.

Nugent, Edward. Interference between Palmer and Nugent: applications for patents for improvements in revolving fire-arms: argument. *See* **How,** T. P.

Numa, Pol. Littérature et beaux-arts. *See* **Écho de la littérature.**

Numan, A. Bijdrage tot de ontleedkundige en physiologische kennis der horens van het rundvee. 4°. *Amsterdam,* 1847.

NUMISMATICS. *See, also,* **Coins, Coinage.**

——— The American numismatical manual. *See* **Dickeson,** Montroville Wilson.

NUREMBERG. Gewerb-Verein in Nürnberg. Berichte. Jahrg. 1861-1869. 4°. *Nürnberg,* 1864-69.

——— Naturhistorische Gesellschaft zu Nürnberg. Abhandlungen. B. 5. 8°. *Nürnberg,* 1872.

NURSES and nursing. *See* **Storer,** Horatio Robinson.

NURSING, Home. *See* **Household manuals, v. 5.**

NUTRITIVE plants of Europe. Europäischen Nahrungspflanzen. Von Anton Adam Schmied. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

Nutt, Thomas. Humanity to honey bees; or, practical directions for the management of honey bees. 4th ed. rev., etc. by Thomas Clark. 12°. *Wisbech,* 1837.

Nuttall, Thomas. The North American sylva: a description of the forest trees of the United States, Canada, and Nova Scotia, not described in the work of F. Andrew Michaux, being a continuation of Michaux' work. 3 v. roy. 8°. *Philadelphia,* 1853.

Nystrom, John W. Pocket book of mechanics and engineering, containing a memorandum of facts and connection of practice and theory. 24°. *Philadelphia,* 1855.

——— A treatise on screw propellers and their steam engines. Accompanied with a treatise on bodies in motion in fluid, exemplified for propellers and vessels; also a description of a calculating machine. 8°. *Philadelphia,* 1852.

O., W. The circles of proportion and horizontall instrument. Both invented, and the uses of both written in Latine, by W. O. Translated into English, and set forth for the publique benefit, by William Forster. sm. 4°. *London,* 1639.

OAKUM spinning. Die Spinnerei-Industrie. *See* **Ramming,** Hermann. **281 Neuer Schauplatz der Künste.**

OARSMAN'S manual. The annual illustrated catalogue for 1871. *See* **Balch,** George T.

Oates, George. Interest tables, at seven per cent, in which are shown the interest on any sum from one dollar to ten thousand; for any time from one day to one year, by days. 4°. *New York,* 1851.

OATS, Decimal calculations for weighing. *See* Merritt, W. K., and co.

OBELISK of Luxor. L'obélisque de Luxor: histoire de sa translation à Paris. *See* **Lebas,** M. A.

OBERLAND, and its glaciers. *See* **George,** H. B.

Oberleithner, Carl v., and **Hohenbruck,** R. A. v. Flachs- und Hanfindustrie. Flachs-Interessenten. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

OBSERVATION, Sciences of. Études et lectures sur les sciences d'observation et leurs applications pratiques. *See* **Babinet,** Jacques.

Observations on the preservation of animal and vegetable substances; with an account of Appert's process, and the subsequent improvements of that invention. 8°. *Dublin,* 1839.

——— on surgical diseases of the head and neck. From the Memoirs of the Royal academy of surgery of France. Transl. and ed. by Drewry Ottley. roy. 8°. *London,* 1848.

OBSERVATORIES, Hints on private. *See* **Simms,** W. Achromatic telescope.

Observer, The intellectual. *See* **Intellectual** observer.

OBSTETRICAL instruments. Abbildungen der in der Geburtshülfe gebräuchlichen Instrumente. *See* **Kilian,** H. F.

OBSTETRICS. *See, also,* **Midwifery.**

Digitized by Google

OBSTETRICS. Cours complet d'accouchemens. *See* **Hatin,** Jules.

——— Obstetric catechism. *See* **Warrington,** Joseph.

——— Obstetric medicine and surgery. *See* **Ramsbotham.** Fr. H.

——— Pollard and Minkler's obstetrical supporter, etc. *See* **Pollard,** A.

——— The principles and practice of. *See* **Miller,** Henry.

——— The science and the art of. *See* **Meigs,** Charles D.

OCCULT physics. La physique occulte, ou traité de la baguette divinatoire. *See* **De Vallemont,** M. L. L.

——— sciences. Des sciences occultes. *See* **Salverte,** E.

OCCULTATIONS, visible in the United States, 1851, 1852. Computed by J. Downes. **Smiths'n contrib., v. 2, 3, and 6.**

OCEAN (The); its unfathomable depths and natural phenomena. *See* **Higginson,** F.

——— mail. The ocean post. *See* **Rainey,** Thomas.

Ockel, E. Bericht über das Versuchsfeld zu Frankenfelde und alle dort in den Jahren 1851–1853 ausgeführten komparativen Versuche. Hrsg. von. 3 Bde. 8°. *Berlin,* 1854–58.

OCULISTS' instruments. Oculistische Instrumente. Von Hans Adler. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Odelph, A. Ausführliche Anleitung zur Kultur des Mohns, um dieselbe auf das doppelte des gewöhnlichen Ertrags zu bringen, durch seine Benutzung auf Opium. 8°. *Stuttgart,* 1867. pp. 24.

Odling, William. Chemical method. Notation, classification and nomenclature. Transl. by. *See* **Laurent,** A.

——— The food of plants. **Science lectures for the people, series 3.**

——— A manual of chemistry, descriptive and theoretical. Part 1. 8°. *London,* 1861.

Oechsle, Christian Ludwig. Verzeichniss physikalischer und chemischer Instrumente, Apparate und Maschinen. *Illus.* 8°. *Braunschweig,* 1855. pp. 23.

Oehlschläger, J. C. English-German and German-English pocket dictionary, with a pronunciation of the English part in German characters and sounds. 24°. *Philadelphia,* 1850.

——— A pronouncing German dictionary, German-English and English-German, with a pronunciation of the German part in English characters and English sounds. 24°. *Philadelphia,* 1852.

Oersted, Hans Christian. Der mechanische Theil der Naturlehre. *Illus.* 8°. *Braunschweig,* 1851.

Oesterlen, F. Medical logic. Transl. and ed. by G. Whitley. 8°. *London,* 1855.

Oettel, Robert. Die praktische Hühnerzucht. Nebst einem Anhang betreffend die Zucht des Perlhuhns, des Truthuhns, des Fasanen, der Ente und der Gans. 8°. *Görlitz,* 1863.

OFFAL. Die Verwerthung der städtischen und Industrie-Abfallstoffe, etc. *See* **Fischer,** Ferdinand.

OFFENBACH. Verein für Naturkunde. Bericht des Offenbacher Vereines für Naturkunde über seine Thätigkeit. Nebst einem Anhange wissenschaftlichen Inhaltes. 1ster–14ter. 8°. *Offenbach am Main,* 1859–73.

——— ——— Denkschrift. Von Dr. Johann Christ. Am 18. August 1863. 4°. *Offenbach,* 1863.

OFFICIAL gazette of the United States patent office. *See* UNITED STATES. **Interior** dept. Patent office.

Offutt, Denton. The educated horse. Teaching horses and other animals to obey at a word, sign, or signal, to work or ride: also the breeding of animals, and discovery in animal physiology, and improvement of domestic animals. 8°. *Washington,* 1854.

Ogg, —. Treatise on heat. *See* LONDON. **Society of useful knowledge, v. 1.**

Ogilvy, —. The home book. *See* **Valentine,** R.

OHIO, Abstract of the population of, in 1850. 8°. *Columbus,* 1851.

——— Ancient works in. By C. Whittlesey. **Smiths'n contrib., v. 3.**

Ohio (The) cultivator; a journal of agriculture, horticulture, and the promotion of domestic industry. v. 1–15. *Illus.* fol. 8°. *Columbus, O.,* 1845–59.

Ohm, Georg Simon, Denkrede auf. *See* **Lamont,** J.

Digitized by Google

OIL colors. Painting in oil colors upon paper. *See* **Sutton**, Thomas.

—— —— Ueber Ölfarbe und Conservirung der Gemälde-Gallerien, durch das Regenerations-Verfahren. *See* **Pettenkofer**, Max von.

—— district of Pennsylvania. *See* **Plumb**, H. S.

—— Handbuch der Oelbereitung und Oelreinigung. *See* **Julia de Fontenelle**, J. S. E. **36 Neuer Schauplatz der Künste.**

—— mills. Maschinen und Apparate zur Oel-Fabrikation. *See* **Haindl**, Sebastian.

—— —— Musterzeichnungen von Oelmühlen. *See* HESSE-DARMSTADT.

—— of almonds. Ueber das Verhalten des Bittermandelöles zum Sauerstoffe. *See* **Schoenbein**, C. F.

—— painting, Handbook of. *See* **Handbook** of young artists.

—— —— History of. *See* **Eastlake**, Charles Locke.

—— region of Pennsylvania, Map of. *See* **Map.**

—— regions, History of the Venango. *See* **Harris**, Charles H.

OILS. Abridgments English Patents, No. 27.

—— Aetherische Oele. *See* **Maier**, J.

—— Die Chemie der austrocknenden Oele. *See* **Mulder**, G. J.

—— Essai et dosage des huiles employées dans le commerce ou servant à l'alimentation; des savons et de la farine de blé. *See* **Cailletet**, Cyrille.

—— Die Fabrikation der aetherischen Oele und Riechstoffe zum Gebrauche für Fabrikanten. *See* **Mierzinski**, Stanislaus.

—— Fabrikation mineralischer Oele. *See* **Oppler**, Theodor.

—— Lubricating. Die Schmiermittel. *See* **Rabe**, Alexander.

—— Manuel du fabricant et de l'épurateur d'huiles. *See* **Julia de Fontenelle**, J. S. E. **79 Manuels Roret.**

—— Manufacture of photogenic, or hydrocarbon oils. *See* **Antisell**, Thomas.

—— The oily acids. *See* **Turner**, Edward.

Olaf, King. Saga Olafs konungs ens Helga. *See* **Sturlasson**, Snorre.

Olcott, Henry S. Outlines of the first course of Yale agricultural lectures. Introduction by John A. Porter. 12°. *New York*, 1860.

OLDENBURG. Statistische Nachrichten über das Grossherzogthum Oldenburg. Hrsg. vom statistischen Bureau. 1-3. Heft. 4°. *Oldenburg*, 1857-58.

Oliver, D. Natural history review; ed. by. *See* **Natural** history review.

Oliver, Robert. Time and traverse table. *See* **Tredgold**, T. **Steam** engine, 1st series.

Olivier, Théodore. De la cause du déraillement des wagons sur les courbes des chemins de fer. 8°. *Paris*, 1846.

—— Dictionnaire de l'industrie. *See* **Baudrimont**, A. E., and others.

Ollendorff, H. G. A key to the exercises in the new method of learning to read, write and speak a language in six months; adapted to the Italian. Ed. by Felix Forresti. 12°. *New York*, 1846.

Olmsted, Denison. An introduction to natural philosophy. 8°. *New York*, 1849.

—— Memoir of Eli Whitney. 8°. *New Haven*, 1846.

—— On the recent secular period of the aurora borealis. **Smiths'n contrib., v. 8.**

One thousand choice receipts, mysteries and disclosures, touching every branch of business. 24°. *Lewiston*, 1866.

O'Neill, Charles. Chemistry of calico printing, dyeing and bleaching, including silken, woollen and mixed goods. 8°. *Manchester*, 1860.

—— A dictionary of dyeing and calico printing, containing a brief account of all the substances and processes in use in the arts of dyeing and printing textile fabrics. And an essay on coal tar colors. By A. A. Fesquet. 8°. *Philadelphia*, 1869.

O'Neill, Patrick. The carpenter's guide to stair building and hand-railing, based upon plain and practical principles. l. 4°. *Richmond, Va.*, 1856.

ONIONS, How to cook, or onions dressed and served in a hundred different ways. *See* **Household manuals, v. 10.**

ONTARIO, Province of. Annual report of the commissioner of agriculture and public works, on agriculture and the arts, for the year 1870. 8°. *Toronto*, 1871.

OÖLOGY, North American. By T. M. Brewer. **Smiths'n contrib., v. 11.**

OPHTHALMIC medicine and surgery. *See* **Jones**, T. Wharton.

—— surgery and treatment. *See* **Phillips**, John.

Digitized by Google

OPHTHALMOSCOPE (The). *See* **Hogg**, Jabez.

Oppermann, C. A. Nouvelles annales d'agriculture. *See* **Nouvelles.**

——— Nouvelles annales de la construction. T. 1-4, 1855-58. fol. *Paris*, 1855-58.

——— Visites d'un ingénieur à l'exposition universelle de 1867. Notes et croquis, chiffres et faits utiles. Texte et atlas. 8°. *Paris*, 1867.

Oppler, Theodor. Handbuch der Fabrikation mineralischer Oele aus Steinkohlen, Braunkohlen, Holz, Torf, Petroleum und anderen bituminösen Substanzen, so wie der Gewinnung von künstlichen Farbstoffen des Anilins und verwandter Producte des Steinkohlentheers. *Illus.* 8°. *Berlin*, 1862.

Opportunities for industry. *See* **Freedley**, E. T.

OPTICAL instruments. *See* Pritchard, A.

——— ——— Catalogue of. *See* Casella, L. P.

——— ——— Catalogue of. *See* Pike, Benjamin.

——— ——— Description of. By A. Pritchard. *See* LONDON. **Society of useful knowledge, v. 2.**

——— ——— Optische und akustische Apparate. Von L. Ditscheiner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

OPTICS. *See, also,* **Light.**

——— *See* **Bartlett**, W. H. C. **Elements** of natural philosophy.

——— *See* **Newton**, Isaac.

——— Account of Newton's. *See* **Lardner**, D.

——— A compleat system of. *See* **Smith**, Robert.

——— Einleitung in die höhere Optik. *See* **Beer**, August.

——— Elements of. *See* **Emerson**, William.

——— Manuel d'optique. *See* **Brewster**, D. **19 Manuels Roret.**

——— Nature of light; with account of physical optics. *See* **Lommel**, E. **International scientific series, v. 18.**

——— New elements of, or the theory of the aberrations, dissipation and colours of light. *See* **Martin**, B.

——— Optical investigations. *See* **Johnson**, G. H. S.

——— Optik, Catoptrik und Dioptrik. *See* **Barfuss**, F. W. **3 Neuer Schauplatz der Künste.**

OPTICS. Optique photographique. *See* **Chevalier**, C. **Méthodes** photographiques.

——— Photographische Optik. *See* **Monckhoven**, D. van.

——— Traité d'optique sur la gradation de la lumière. *See* **Bouguer**, M.

——— Treatise on. *See* **Brewster**, D. **Lardner's cabinet cyclopædia, v. 105.**

——— A treatise on. *See* **Farrar**, John.

——— A treatise on. *See* **Griffin**, William N.

——— A treatise on. *See* **Nugent**, E.

——— A treatise on. *See* **Parkinson**, S.

——— Treatise on. By D. Brewster. *See* LONDON. **Society of useful knowledge, v. 1.**

——— Treatise on Newton's. By D. Lardner. *See* LONDON. **Society of useful knowledge, v. 2.**

——— Undulatory theory of. *See* **Airy**, George Biddell.

——— Unfrequented paths in. *See* **Gorham**, John.

——— The wonders of. *See* **Marion**, F. **Illustrated library of wonders, v. 5.**

ORACLE, The traveller's. *See* **Kitchiner**, William.

ORCHARD and fruit garden, The. *See* **Watts**, Elizabeth.

Ord, George. Entomology of North America, by T. Say; with a memoir of the author, by. *See* **Say**, T.

ORDINANCES and regulation for the royal household. *See* LONDON. **Society** of antiquaries.

ORDNANCE and armor, Treatise on. *See* **Holley**, Alexander L.

——— and gunnery. *See* **Benton**, J. G.

——— and gunnery, Instruction in. *See* **Benton**, J. G.

——— and marine material. Report on the Vienna exhibition. By W. A. Kirkland. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— and naval gunnery, Treatise on. *See* **Simpson**, E.

——— Annual report of the chief of ordnance. *See* UNITED STATES. **War** dept. Ordnance bureau.

——— The Armstrong gun, compared with Britten's rifled guns. *See* **Britten**, B.

——— Le canon rayé prussien. *See* **Pourcault**, Feréol.

Digitized by Google

ORDNANCE. Des canons rayés. *See* **Adts, N.**

——— Des canons rayés. *See* **Schmoelzl, J.**

——— Des canons rayés en Belgique. *See* **Canons rayés.**

——— Engineer and artillery operations against the defences of Charleston harbor in 1863. *See* **Gillmore,** Quincy A.

——— Expériences, faites en Suède, sur des canons à âme rayée. *See* **Thiroux.**

——— Fabrication des bouches à feu. *See* **Adts, N.**

——— Fabrication des bouches à feu. *See* **La Martillière.**

——— Fabrication des bouches à feu de bronze, au 16e siècle, en Italie. *See* **Biringuccio,** Vanuccio.

——— Fabrication et durée des bouches à feu, en fer et en bronze. *See* **Meyer,** M.

——— Instructions for care and preparation of ordnance. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— instructions for the United States navy. *See* UNITED STATES. **Navy** department.

——— manual. *See* UNITED STATES. **War** department.

——— memoranda, Nos. 14–19. *See* UNITED STATES. **War** department.

——— Partial list of cases of gross carelessness in details of ordnance administration. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— Report on effects of firing with heavy ordnance from casemate embrasures. By J. G. Totten. *See* UNITED STATES. **War** department.

——— Résistance d'un solide encastré dans des parois cylindriques. *See* **Tersen,** E.

——— Resources of warfare, with reference to rifled. *See* **Scoffern,** J.

——— Rifled. *See* **Thomas,** L.

Ordronaux, John. The jurisprudence of medicine, in its relations to the law of contracts, torts, and evidence; with a supplement on the liabilities of vendors of drugs. roy. 8°. *Philadelphia,* 1869.

OREGON. Exploring tour beyond the Rocky Mountains. With a map of Oregon. *See* **Parker,** S.

O'Reilly, Edward. An Irish-English dictionary. Rev. by John O'Donovan. 4°. *Dublin,* 1864.

O'Reilly, Henry. Brief statements from prominent agriculturists concerning the American terracultor. 8°. *Rochester,* 1860. pp. 7.

ORES. Concentration of ores, including the chlorination process. *See* **Kustel,** Guido.

——— Lehrbuch der Aufbereitungskunde. *See* **Rittinger,** Peter v.

——— Preparation of, Report on. By H. F. Q. D'Aligny and others. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 4.**

——— Taschenbuch der Aufbereitungskunde. *See* **Rittinger,** Peter v.

——— Treatise on ore deposits. *See* **Cotta,** Bernhard von.

Orffyreus, Automaton constructed by. *See* **Kenrick,** W.

Orfila, M. J. B. Traité de toxicologie. T. 1, 2. 5e éd. 8°. *Paris,* 1852.

Organ für die Fortschritte des Eisenbahnwesens in technischer Beziehung. Begründet von Edmund Heusinger von Waldegg. Hrsg. von Hermann Scheffler. B. 1–18, 1846–63. N. F., B. 1–13, 1864–76. 8° and 4°; pl., fol. *Wiesbaden,* 1846–76——.

——— Same. Sach-Register. (Jahrg. 1845–60, B. 1–15.) 8°. *Wiesbaden,* 1862. pp. 40. [Another, 1864–73, B.1–9, N. F.]

ORGAN-builder. Art du facteur d'orgues. Par F. Bedos de Celles, [J. F. Monniotte?] PARIS. **Acad. roy. des sc.; arts et métiers, v. 21, 22.**

——— (The): its history and construction. *See* **Hopkins,** E. J.

——— Lehrbuch der Orgelbaukunst. *See* **Töpfer,** J. G. **208–211 Neuer Schauplatz der Künste.**

——— manual, The. *See* **Nicholson,** Henry D.

——— Die Orgel, ihre Beschreibung, Behandlung und Geschichte. *See* **Eichler,** C.

——— Die Orgel und ihr Bau. *See* **Seidel,** Johann Julius.

ORGANIC life, The motive power of. *See* **Sherwood,** Henry Hall.

Orientalisch- und occidentalischer Sprachmeister, welcher nicht allein hundert Alphabete nebst ihrer Aussprache, so bey denen meisten Europäisch- Asiatisch- Africanisch- und Americanischen Völckern und Nationen gebräuchlich sind, sondern auch das Gebet des Herrn in 200 Sprachen mittheilet. 12°. *Leipzig,* 1748.

Digitized by Google

ORIENTALS, Mathematics of. Histoire des sciences mathématiques chez les orientaux. *See* **Sédillot**, L. P. E. A.

ORIGIN of genera. *See* **Cope**, Edward D.

——— of species. *See* **Darwin**, Charles.

——— of the discoveries attributed to the moderns. *See* **Dutens**, L.

Original and selected patterns of crochet work. By a lady. 3d series. 21°. *Philadelphia*, 1847.

Origine des premières sociétés des peuples, des sciences, des arts et des idiomes anciens et modernes. 8°. *Amsterdam*, 1769.

ORIGINS and inventions, Portfolio of. *See* **Pulleyn**, William.

——— A history of inventions, discoveries, and. *See* **Beckmann**, J.

——— Nouveau dictionnaire des origines, inventions et découvertes. *See* **Noël**, F. J., and **Carpentier**, L. J. M.

Ormsby, E. S. An easy method of calculating the change wheels in all their various combinations for screw cutting, feed, etc., for the slide lathe, designed for the practical mechanic. 18°. *New York*, 1854. pp. 12.

ORNAMENT. Art in ornament and dress. *See* **Blanc**, Charles.

——— The encyclopedia of. *See* **Shaw**, H.

——— The grammar of. *See* **Jones**, Owen.

——— Polychromatic. *See* **Racinet**, A.

ORNAMENTAL gardening, Hints on. *See* **Papworth**, John Buonarotti.

——— metal work. Zinkguss-Ornamente, etc. *See* **Geiss**, Moritz.

——— metal worker's director. *See* **Cottingham**, L. N.

ORNAMENTS, A collection of, in the antique style. *See* **Richardson**, G.

——— Gothic. A series of examples. *See* **Colling**, J. K.

——— Musterzeichnungen von Ornamenten. *See* HESSE-DARMSTADT.

——— Musterzeichnungen für Zimmermaler und Lackirer. *See* **Musterzeichnungen.**

ORNITHOLOGY. Birds of southwestern Mexico, collected by F. E. Sumichrast. *See* UNITED STATES. **Interior dept. National museum. Bulletin 4.**

ORRERIES. Mouvements des corps célestes, démontrés à l'aide des appareils cosmographiques. *See* **Robert**, Henri.

Orr's Circle of the sciences: a series of treatises on the principles of science, with their application to practical pursuits. 9 v. 8°. 1854-60.

Orr's Circle of the sciences—Continued.

Contents.

v. 1. Organic nature:—Principles of physiology, by J. S. Bushnan; Structure of the skeleton and teeth, Richard Owen; Varieties of the human race, R. G. Latham.

2. Organic nature:—Botany, structural and systematic, Edward Smith; Zoology, invertebrated animals, W. S. Dallas.

3. Organic nature:—Vertebrated animals, W. S. Dallas.

4. Inorganic nature:—Geology and physical geography, David T. Ansted; Mineralogy and crystallography, J. Tennant and Walter Mitchell.

5. Navigation:—Nautical astronomy, J. R. Young; Practical astronomy, Hugh Breen; Meteorology, John Scoffern and E. J. Lowe.

6. Elementary chemistry:—Imponderable agents, light, heat, electricity, simple chemical bodies, and their inorganic compounds, John Scoffern.

7. Practical chemistry:—Electro-deposition, George Gore; Photographic art, Marcus Sparling; Chemistry of food and of artificial illumination, John Scoffern.

8. Mathematical sciences:—Simple arithmetic, algebra, and the elements of Euclid, J. R. Young; Planes, spherical trigonometry, series, logarithms, and mensuration, J. F. Twisden; Practical geometry, Alexander Jardine.

9. Mechanical philosophy:—Properties of matter, elementary statics, dynamics, hydrostatics, hydrodynamics, pneumatics, practical mechanics, and the steam-engine, Walter Mitchell, J. R. Young, and John Imray.

Orth, A. Die Akustik grosser Räume, mit speciellen Bezug auf Kirchen. [With plans and maps.] fol. *Berlin*, 1872. pp. 20. [Besonderer Abdruck aus der Zeitschrift für Bauwesen, Jahrgang 1872.]

ORTHOPEDICS. A treatise on deformities. *See* **Prince**, David.

ORTHOPHONY, or the cultivation of the voice in elocution. *See* **Russell**, William.

Ortmann, Ignatius, and others. Fertige Kleider, Frauenkleider und Kostume. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Osann, G. Erfahrungen in dem Gebiete des Galvanismus, gesammelt von. Mit Abdrücken von galvanisch-geätzten Zinnplatten. 8°. *Erlangen*, 1852.

Osborn, A. Field-notes of geology. 16°. *New York*, 1858.

Osborn, H. S. The metallurgy of iron and steel, with reference to American materials and processes. 8°. *Philadelphia and London*, 1869.

Digitized by Google

Osborne, John Walter. On a new photolithographic process. 8°. *Melbourne*, 1860.

Osburn, William. Account of an Egyptian mummy presented to the Leeds philosophical society by J. Blayds. 8°. *Leeds*, 1828.

OSTEOLOGY. List of skeletons and crania, United States army medical museum, for use during the exposition of 1876. *See* UNITED STATES. War department.

Ostrander, Tobias. A complete system of mensuration of superficies and solids, of all regular figures. 3d ed. 8°. *New York*, 1834.

Oswald, John. An etymological dictionary of the English language. Revised by J. M. Keagy. 16°. *Philadelphia*, 1847.

Otis, George A. Description of selected specimens from the surgical section of army medical museum, exhibited at Philadelphia, 1876. *See* UNITED STATES. War department.

—— Description of United States army medical transport cart, exhibited at Philadelphia, 1876. *See* UNITED STATES War department.

—— Preparations, etc., in the section of human anatomy, United States army medical museum, exhibited at Philadelphia, 1876. *See* UNITED STATES. War department.

Ott, Adolph. The art of manufacturing soap and candles, including the most recent discoveries; embracing all kinds of hard, soft, and toilet soaps; especially those made by the cold process. The modes of detecting frauds, etc. 8°. *Philadelphia*, 1867.

Otté, Joachim. Landscape photography: a description of the manipulations and apparatus necessary for the production of landscape pictures, geological sections, etc., by the calotype, wet collodion, collodio-albumen, albumen, gelatine, and wax-paper processes. 8°. *London*, 1858.

Ottley, Henry. A biographical and critical dictionary of recent and living painters and engravers, forming a supplement to Bryan's dictionary of painters and engravers, as edited by George Stanley. roy. 8°. *London*, 1866.

Otto, Emil. A practical and easy course of the German language. American ed. 18°. *Louisville*, 1863.

Otto, Friedrich Julius. Anleitung zur Ausmittelung der Gifte, und zur Erkennung der Blutflecken bei gerichtlich-chemischen Untersuchungen. Unter Mitwirkung von Dr. Robert Otto. 8°. *Braunschweig*, 1867.

—— Die Bierbrauerei, die Branntweinbrennerei und die Liqueur-Fabrikation. 8°. *Braunschweig*, 1865.

—— Die Essig-Fabrikation, die Zucker- und Stärke- Fabrikation, die Fabrikation des Stärkegummis, Stärkesyrups und Stärkezuckers, sowie die Butter- und Käse-Bereitung. 8°. *Braunschweig*, 1867.

—— Lehrbuch der Essigfabrikation. *Illus.* 2te Aufl. 8°. *Braunschweig*, 1857.

—— Lehrbuch der rationellen Praxis der landwirthschaftlichen Gewerbe. 2 Bde. *Illus.* 5te Aufl. 8°. *Braunschweig*, 1859–60.

—— A manual of the detection of poisons by medico-chemical analysis. Transl. from the German by W. Elderhorst. 12°. *New York*, 1857.

—— Der rationelle Brennereibetrieb. Vorwort von. *See* **Schubert,** E.

—— Rübenzucker fabrikant. Vorwort von. *See* **Walkhoff,** L.

Otto, Jakob August. A treatise on the structure and preservation of the violin and all other bow instruments. With an account of the most celebrated makers and of the genuine characteristics of their instruments. Transl. by John Bishop. *Illus.* 8°. *London*, 1848.

Our English home; its early history and progress; with notes on the introduction of domestic inventions. 8°. *Oxford and London*, 1860.

—— family physician; a guide to the detection and treatment of diseases; embracing allopathic, homœopathic, hydropathic, eclectic, and herbal modes of treatment. 8°. *Chicago*, 1869.

OUSE, Bridge over the. By J. S. Valentine. *See* **Haskoll,** W. D. **Assistant** engineer's railway guide.

Overman, Frederick. The manufacture of iron in all its various branches: also a description of forge hammers, rolling mills, blast machines, hot blast, etc.: and an essay on the manufacture of steel. *Illus.* 8°. *Philadelphia*, 1850.

—— The manufacture of steel, containing the practice and principles of working and making steel: a handbook for blacksmiths and workers in steel and iron,

Digitized by Google

Overman, Frederick—Continued.
wagon-makers, die-sinkers, cutlers, and manufacturer of files and hardware. 12°. *Philadelphia*, 1851.

—— The moulder and founder's pocket guide: with an appendix containing receipts for alloys, bronze, varnishes and colors for castings, and tables of the strength and other qualities of cast metals. *Illus.* 12°. *Philadelphia*, 1853. [1st ed., 1851.]

—— Practical mineralogy, assaying, and mining: with description of useful minerals, and instructions for assaying and mining, according to the simplest methods. 12°. *Philadelphia*, 1851.

—— Treatise on metallurgy; comprising mining and general and particular metallurgical operations, with a description of charcoal, coke, and anthracite furnaces, blast machines, hot blast, forge hammers, rolling mills, etc. *Illus.* 1st ed. 8°. *New York*, 1852. 2d ed., 1854. 6th ed., 1866.

OVERSHOES. Fertige Kleider. Camaschen. Von Josef Migotti. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Owen, *Mrs.* Henry. The illuminated book of needlework, comprising knitting, netting, crochet and embroidery. Preceded by a history of needlework, including an account of ancient historical tapestries. Ed. by the Countess of Wilton 12°. *London*, 1847.

Owen, Richard. Geology and inhabitants of the ancient world. The animals constructed by B. W. Hawkins. 8°. *London*, 1854. **Crystal palace library, v. 3.**

—— The raw materials from the animal kingdom. *See* **Lectures** on the results of the exhibition.

—— Structure of the skeleton and of the teeth. *See* **Bushnan,** J. S., and others. **Orr's circle of the sciences, v. 1.**

—— Zoology. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.

Owen, Robert, Life of. *See* **Packard,** Frederick A.

Owens, G. Salt Lake City directory: including a business directory of Provo, Springville, and Ogden, Utah territory; compiled and published by. 8°. *Salt Lake City*, 1867.

OX, fossil, Extinct species of. By J. Leidy. **Smiths'n contrib., v. 5.**

OXALATES. Die oxalsauren Salze. *See* **Vogel,** A.

OXIDES. Abridgments English Patents, No. 40.

Oxland, Robert. Useful metals and their alloys. *See* **Scoffern,** John, and others.

Oxley, Thomas. A supplement, or only true key to the use and construction of the celestial planispheres, for working nativities and resolving astronomical problems by the scale and compasses. 8°. *London*, 1833.

OXYGEN. Kenntniss des Sauerstoffes. *See* **Schoenbein,** C. F.

OYSTER, A history of the. *See* **Eyton,** T. C.

Ozanam, Jacques. Recreations in mathematics and natural philosophy; containing amusing dissertations and enquiries concerning a variety of subjects. Enlarged by M. Montucla. Transl. from the French by Charles Hutton. 4 v. With 1 v. of plates. 8°. *London*, 1803.

—— Recreations mathematical and physical, laying down and solving many profitable and delightful problems, of arithmetick, geometry, opticks, etc. 8°. *London*, 1768.

Pabst, H. W. v. Landwirthschaftlicher Nachlass. *See* **Schwerz,** Johann Nep.

—— Lehrbuch der Landwirthschaft. B. 1. Allgemeine Grundsätze des Ackerbaues. 2. Der landwirthschaftliche Pflanzenbau. 3. Die landwirthschaftliche Hausthierzucht. 4. Die landwirthschaftliche Betriebslehre. 4 Bde. 8°. *Darmstadt*, 1843–48.

PACIFIC slope, Resources of. *See* **Brown,** J. Ross.

Packard, A. S. A monograph of the geometrid moths, or phalænidæ of the United States. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. v. 10.**

Packard, Frederick A. A life of Robert Owen. 18°. *Philadelphia*, 1868.

Packard, John H. A manual of minor surgery. 12°. *Philadelphia*, 1863.

Päcker, Ludwig. Amerikanische Reise-Skizzen aus dem Gebiete der technischen Landwirthschaft und des socialen Lebens. 8°. *Braunschweig*, 1867.

Digitized by Google

PADDING, Art of. *See* **Smith**, D. The dyer's instructor.

Page, Charles Grafton. History of induction. The American claim to the induction coil, and its electrostatic developments. Part 1. Induction and induction apparatus. 2. Contact, or circuit breakers. 3. Electrostatic properties of induction coils and magneto-electric machines. 8°. *Washington*, 1867.

Page, David. Economic geology; or geology in its relations to arts and manufactures. 8°. *Edinburgh and London*, 1874.

——— Handbook of geological terms and geology. 8°. *Edinburgh*, 1859.

——— The past and present life of the globe; being a sketch in outline of the world's life system. 8°. *Edinburgh*, 1861.

Page, J. Guide for drawing the acanthus, and every description of ornamental foliage. *Illus.* 12°. *London, n. d.*

Page, Thomas. Report on the harbors of Holyhead and Porth-dyn-llaen. **Weale's papers on engineering, v. 3.**

Page, Thomas J. La Plata, the Argentine Confederation and Paraguay: a narrative of the exploration of the tributaries of the river La Plata and adjacent countries during the years 1853 to 1856, under the orders of the United States government. 8°. *New York*, 1859.

Paige, A. Electropathic guide, devoted to electricity and its medical applications. 8°. *Boston*, 1849.

PAIN. Essays on life, sleep, pain, etc. *See* **Dickson**, Samuel Henry.

——— On the safe abolition of. *See* **Ellis**, Robert.

Paine, Martyn. The institutes of medicine. 8°. *New York*, 1858.

——— Materia medica and therapeutics. 12°. *New York*, 1848.

Paine, William. An epitome of the American eclectic practice of medicine; embracing pathology, symptomatology, diagnosis, prognosis, and treatment. 12°. *Philadelphia*, 1857.

Painter, Howard. Report on the metallurgy of lead, silver, copper, and zinc. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 4.**

Painter (The), gilder and varnisher's companion; containing a statement of the diseases and accidents to which painters, gilders and varnishers are peculiarly liable; with the simplest and best methods of prevention and remedy. 12°. *Philadelphia*, 1850. 13th ed., 1869.

PAINTERS, Modern. *See* **Ruskin**, John.

——— sculptors and architects, The lives of British. *See* **Cunningham**, Allan.

——— sculptors, architects, engravers, and their works. *See* **Clement**, Clara Erskine.

PAINTING. Academie der Malerei. *See* **Hertel**, A. W. **134 Neuer Schauplatz der Künste.**

——— Ancient glass painting in England. *See* **W.**, C.

——— and engraving, The grammar of. *See* **Blanc**, Charles.

——— Art and artists. *See* **Haskins**, R. W.

——— Art de la peinture en bâtimens. *See* **Doublette-Desbois. Encyclopédie populaire, v. 2.**

——— Art of painting from the 12th to the 18th century. *See* **Merrifield**, Mary P.

——— Art of painting in oil colors. *See* **Cawse**, J.

——— Art of painting on glass. *See* **Fromberg**, E. O. **Weale's series, No. 41.**

——— Art of painting on glass. *See* **Gessert**, M. A. **Weale's series, No. 40.**

——— Arts and sciences of the antients. *See* **Rollin**, Charles.

——— Bildende Kunst der Gegenwart. Malerei. Von Josef Bayer. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 25.**

——— Decorative painter's guide. *See* **Whittock**, N.

——— Decorative painting applied to English architecture during the middle ages. *See* **Blackburne**, E. L.

——— The epochs of, characterized. *See* **Wornum**, Ralph N.

——— fresco, encaustic and tempera painting, Treatise on. *See* **Latilla**, Eugenio.

——— Gehülfe für Haus- und Stubenmaler. *See* **Barber**, E., **Tring**, and **Herts. 204 Neuer Schauplatz der Künste.**

——— Handbook of oil painting, etc. *See* **Handbook.**

——— History of oil painting. *See* **Eastlake**, Charles Locke.

——— The house painter; or, decorator's companion. *See* **Higgins**, W. M.

Digitized by Google

PAINTING. How to paint photographs. *See* **Ayres,** George B.

——— in oil and in fresco, History of. *See* **Mérimée,** M. J. F. L.

——— in oil colors upon paper. *See* **Sutton,** Thomas.

——— Kunst des Staffirmalers. *See* **Watin,** M. **207 Neuer Schauplatz der Künste.**

——— Manuel de miniature, etc. *See* **Constant-Viguier,** S. F. **91 Manuels Roret.**

——— Manuel du coloriste. *See* **Perrot,** A. M. **95 Manuels Roret.**

——— Manuel du peintre. *See* **Arsenne,** L. C. **21 Manuels Roret.**

——— Manuel du peintre en bâtimens et du fabricant de couleurs. *See* **Vergnaud,** A. D. **56 Manuels Roret.**

——— Die Oelmalerei. *See* **Hertel,** A. W. **235 Neuer Schauplatz der Künste.**

——— Original treatises on the arts of. *See* **Merrifield,** Mary P.

——— The painter's guide. *See* **Dreisbach,** J. S., and **Nagel,** P.

——— La peinture au salon de 1861. *See* **Lagrange,** L.

——— Pettenkofer's Regenerations-Verfahren. *See* **Kuhn,** J. A.

——— Restauration alter Gemälde. *See* **Hampel,** J. C. G. **147 Neuer Schauplatz der Künste.**

——— Rudiments of the painter's art. *See* **Field,** G. **Weale's series, Nos. 27, 28.**

——— School of Raphael. *See* **Ralph,** Benjamin.

——— Schools and masters of. *See* **Radcliffe,** A. G.

——— Staffirmalerei. *See* **Thon,** C. F. G. **87 Neuer Schauplatz der Künste.**

——— Treatise on the art of. *See* **Massoul,** Constant de.

——— Treatise on, written in the year 1437. *See* **Cennini,** C.

PAINTINGS. Erhaltung und Restauration der Gemälde. *See* **Déon,** H. **203 Neuer Schauplatz der Künste.**

PAINTS, colors and varnishes. **Abridgments English Patents, No. 50.**

——— Chromatography; a treatise on colors and pigments. *See* **Field,** George.

Pakenham, Edward. Invention of a substitute for a lost rudder, and to prevent its being lost. Also a method of restoring the masts of ships, when wounded, or otherwise injured. 8°. *London,* 1793.

PALÆONTOLOGY. Ancient fauna of Nebraska. By J. Leidy. **Smiths'n contrib., v. 6.**

——— Bericht über die österreichische Literatur der Palaeontologie. *See* VIENNA. **Zoologisch-botanischer Verein.**

——— Description d'un nouveau genre d'édenté fossile. *See* **Nodot,** L.

——— Die fossilen Fische aus den lithographischen Schiefern Bayerns. *See* **Wagner,** A.

——— Die fossilen Säugthier-Überreste von Pikermi. *See* **Wagner,** A.

——— Invertebrate cretaceous and tertiary fossils of the upper Missouri country. By F. B. Meek. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. v. 9.**

——— Om de i Norge forekommende fossile Dyrelevninger fra Qvartaerperioden. *See* **Sars,** Michael.

——— Vertebrates of the cretaceous formations of the west. By E. D. Cope. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. v. 2.**

——— Die urweltliche Fauna des lithographischen Schiefers. *See* **Wagner,** A.

PALESTINE and the Sinaitic peninsula. *See* **Ritter,** Carl.

——— A descriptive geography of. *See* **Schwarz,** *Rabbi* Joseph.

——— Exploration. By C. W. Wilson. **Science lectures for the people, series 6.**

——— Going to Jericho; or sketches of travel in Spain and the East. *See* **Swift,** J. F.

Paley, F. A. A manual of Gothic mouldings: a practical treatise on their formations, gradual developments, combinations and varieties, with full directions for copying them, and for determining their dates. 2d ed. *Illus.* 8° *London,* 1847.

Palgrave, Francis Turner. Essays on art. 12°. *London and Cambridge,* 1866.

Palissy, Bernard, The life of. *See* **Morley,** H.

Digitized by Google

Pallett, Henry. The miller's, millwright's and engineer's guide. *Illus.* 8°. *Philadelphia,* 1866.

Palliser, Fanny Bury. History of lace. 8°. *London,* 1865.

Palmer, B. Frank. Report of the 'Société de chirurgie de Paris', on artificial limbs and amputations; 'The human wheel, its spokes and felloes', an article by Oliver Wendell Holmes; testimony and arguments read before United States commissioner of patents, by Charles F. Stansbury; report of the examiner, and decision of the commissioner, extending the patent for the 'Palmer leg.' 8°. 1863. *n. p.*

Palmer, Joseph H. A treatise on practical bookkeeping and business transactions. 12°. *New York,* 1852.

Palmer, Shirley. A pentaglot dictionary of the terms employed in anatomy, physiology, pathology, practical medicine, surgery, obstetrics, medical jurisprudence, materia medica, pharmacy, medical zoology, botany, and chemistry. Part 1. The leading terms in French, followed by the synonymes in the Greek, Latin, German, and English; explanations in English; and copious illustrations in the different languages. Part 2. A German-English-French dictionary, comprehending the scientific German terms of the preceding part. 8°. *London,* 1845.

Palmer, William. Interference between the applications of W. Palmer and Edward Nugent for patents in revolving fire-arms. Argument. *See* **How,** Thomas P.

PALMISTRY. The secrets thereof disclosed. *See* **Saunders,** Richard.

Pambour, F. M. Guyonneau, *Comte* de. Theory of the steam engine; with a series of practical formulæ to determine the velocity of any engine with a given load, etc. 8°. *London,* 1839.

——— Treatise on locomotive engines upon railways; with practical tables, giving at once the results of the formulæ. To which is added an appendix; showing the expense of conveying goods, by locomotive engines on railroads. 8°. *New York,* 1836.

PANORAMA (The) of science and art. *See* **Smith,** James.

PANORAMA, Rae's Chestnut street. *See* **Rae,** Julio H.

Panot, L. Cours sur les armes à feu portatives. 4e éd. 8°. *Paris,* 1851.

PANTALOONS, Geometrical regulator, for cutting. *See* **Callendine,** George V.

PANTOLOGY. A systematic survey of human knowledge. *See* **Park,** Roswell.

PAPER. Abridgments English Patents, Nos. 11, 12.

——— and boards, Manufacture of. *See* **Proteaux,** A.

——— and paper making, ancient and modern. *See* **Herring,** R.

——— Argument on appeal for a patent for a machine for folding. *See* **Stansbury,** C. F.

——— Art de faire le papier. Par J. J. Le F. de Lalande. *See* **Paris. Acad. roy. des sc.; arts et métiers, v. 33 and 4.**

——— Art of making flowers of. *See* **Bartlett,** *Mrs.*

——— The art of marbling as applied to book edges and. *See* **Woolnough,** C. W.

——— Central-Blatt für deutsche Papierfabrikation. *See* **Central-Blatt.**

——— Chronology of paper and paper-making. *See* **Munsell,** J.

——— cutting, folding and ornamenting, including envelopes, cards, paper hangings, etc. **Abridgments English Patents, No. 12.**

——— Fabricant bunter Papiere. *See* **Thon,** C. F. G. **25 Neuer Schauplatz der Künste.**

——— La fabrication du papier. *See* **Vanden Corput,** E.

——— Fabrikation des Papiers. *See* **Müller,** L.

——— Fabrikation des Papieres aus Stroh und andern Substanzen. *See* **Piette,** L.

——— Handbuch der Papier-Fabrikation. *See* **Le Normand,** L. S. **73, 74 Neuer Schauplatz der Künste.**

——— hangings. Art de la peinture en bâtimens et des décors. Le badigeon et la tenture des papiers. *See* **Doublette-Desbois. Encyclopédie populaire, v. 2.**

——— ——— The paper-hanger's guide. *See* **Arrowsmith,** James.

——— ——— Die Papier-Tapeten-Fabrikation. *See* **Schmidt,** C. H. **14 Neuer Schauplatz der Künste.**

Digitized by Google

PAPER. Journal des fabricants de papier. *See* **Journal.**

——— making. Atlas für mechanische Technologie: Papierfabrikation. *See* **Kronauer, J. H.**

——— ——— Manuel du fabricant de papiers. *See* **Le Normand, L. S. 37 Manuels Roret.**

——— ——— Papierfabrication. *See* **Planche, G. 205 Neuer Schauplatz der Künste.**

——— ——— Report on the manufacture of paper. By G. W. Silcox. *See* UNITED STATES. **State dept. Reports Vienna exp. 1873. v. 2.**

——— Manuel du fabricant de papiers peints. *See* **Le Normand, L. S. 103 Manuels Roret.**

——— money. Ueber unnachahmliche Werthpapiere. *See* **Pfil, C.**

——— Papier-Industrie. Von Emil Twerdy. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

——— The process of marbling and staining. *See* **Sinclair, Hugh.**

PAPIER mâché. **Abridgments English Patents, No. 11.**

——— ——— Die Benutzung des Papiermaché. *See* **Schmidt, C. H. 151 Neuer Schauplatz der Künste.**

——— ——— Book of. *See* **Lady's library.**

Papworth, John Buonarotti. Hints on ornamental gardening; consisting of a series of designs for garden buildings, useful and decorative gates, fences, railings, etc. Accompanied by observations on the principles and theory of rural improvement, interspersed with occasional remarks on rural architecture. roy. 8°. *London*, 1823.

Paradis, Libert de. Vortrag über den Bau eiserner Seeschiffe aus inländischem Material, gehalten im nieder-österreichischen Gewerbe Vereine. 8°. *Wien*, 1864. pp. 47.

PARASITES. Flora and fauna within living animals. By J. Leidy. **Smiths'n contrib., v. 5.**

PARCHMENT. Art de faire le parchemin. Par J. J. Le F. de Lalande. PARIS. **Acad. roy. des sc.; arts et métiers, v. 33 and 3.**

——— Der Pergamentmacher. *See* **Wölfer, M. 94 Neuer Schauplatz der Künste.**

Parent-Duchatelet. Dictionnaire de l'industrie. *See* **Baudrimont, A., and others.**

——— Hygiène publique. Mémoire sur les questions les plus importantes de l'hygiène; précédé d'une notice historique sur la vie et les ouvrages de l'auteur, par F. Leuvet. 8°. *Paris*, 1856.

Paris, —. Dictionnaire de marine à voiles et à vapeur. *See* **Bonnefoux, *Baron* de, and Paris.**

PARIS. Académie des sciences. Comptes rendus hebdomadaires, publiés conformément à une décision de l'académie en date 13 juillet 1835. T. 1–82, 1835–76. 4°. *Paris*, 1835–76——.

——— ——— Same. Table générale. T. 1–31, 3 août 1835 à 30 décembre 1850. T. 32–61, 6 janvier 1851 à 30 décembre 1865. 4°. *Paris*, 1835–65.

——— ——— Histoire de l', depuis son établissement en 1666 jusqu'à 1686. T. 1–2. 4°. *Paris*, 1833. [Bound in 1 v.]

——— ——— Histoire de l', 1699 à 1724. Avec les mémoires de mathématique et de physique. Tirez des registres de cette académie. T. 1–28. 12°. *Amsterdam*, 1711–31.

——— ——— Histoire de l', 1699 à 1788, avec les mémoires de mathématique et de physique. T. 1–91. 4°. *Paris*, 1720–91.

——— ——— Machines et inventions approuvées par l'académie, depuis son établissement jusqu'à présent, avec leur description. Dessinées et publiées par M. Gallon. T. 1–17, 1666 à 1754. 4°. *Paris*, 1735–77.

——— ——— Mémoires de l', depuis 1666 jusqu'à 1699. T. 3–11. 4°. *Paris*, 1729–33.

——— ——— Mémoires de mathématique et de physique, par divers sçavans, et lûs dans ses assemblées. T. 1–11. 4°. *Paris*, 1750–86.

——— ——— Mémoires de mathématique et de physique, 1692–1693, où l'on a joint les observations physiques et mathématiques, envoyées des Indes et de la Chine à l'académie, par les frères jésuites, avec les réflexions de MM. de l'académie, et les notes du P. Gauye. 12°. *Amsterdam*, 1723.

——— ——— Table alphabétique des matières contenues dans l'histoire et les mémoires. T. 1–9, 1666–1780. 4°. *Paris*, 1734–86.

Digitized by Google

PARIS. Académie française, Complément du dictionnaire de l', publié sous la direction d'un membre de l'académie, avec la coopération de MM. Bardin, Barre, Barré, Boileux, de Bonnechose, Bottée de Toulmont, Defrenne, Guibert (Adrien), Jouannin, Jourdan, Mary, Meissas (Achille), Le Roux de Lincy, Michelot, Narcisse Landois, Paris (Paulin), Ravoisié, Regnault, Regnier, Thuillier; avec une préface par Louis Barré. 4°. *Paris*, 1842.

——— ——— Dictionnaire de l'. 16e éd. T. 1-2. 4°. *Paris*, 1835.

——— Académie royale des sciences. Arts et métiers. Descriptions des arts et métiers faites ou approuvées par messieurs de l'Académie royale des sciences. Avec figures. T. 1-45. fol. *Paris*, 1761-79.

CONTENTS.

Tome i. Art du charbonnier, par H. L. Duhamel du Monceau; Art du chaufournier, par C. R. Fourcroy de Ramecourt; Art de la porcelaine, par N. C. de Thy, le comte de Milly; Art de faire les pipes à fumer le tabac, par H. L. Duhamel du Monceau.

T. ii-v. Art d'exploiter les mines de charbon de terre, par M. Morand.

T. vi. Art des forges et fourneaux à fer, par M. le marquis de Courtivron et E. J. Bouchu; Traité du fer, par Swedenborg, traduit du Latin par Bouchu.

T. vii. Art du plombier et fontainier, par C. M. de la Gardette.

T. viii. Art d'adoucir le fer fondu, par R. A. F. de Réaumur; De la forge des enclumes, par H. L. Duhamel du Monceau; Fabrique des ancres, par R. A. F. de Réaumur, avec des additions par H. L. Duhamel du Monceau; Art de convertir le cuivre rouge en laiton, par M. Galon; Art de convertir le fer en fil, par H. L. Duhamel du Monceau; Art de l'épinglier, par R. A. F. de Réaumur, avec des additions par H. L. Duhamel du Monceau, et des remarques de Perronet.

T. ix-xi. Art du coutelier; La coutellerie proprement dite; Le coutelier expert en instruments de chirurgie, par J. J. Perret; Le coutelier en ouvrages communs, par M. Fougeroux de Bondaroy.

T. xii. Art du serrurier, par H. L. Duhamel du Monceau; supplément, essai sur les combinaisons mécaniques, par J. Botterman, traduit du hollandais, publié par A. A. J. Feutry.

T. xiii. Art du potier de terre, par H. L. Duhamel du Monceau; Art du potier d'étain, par Salmon.

T. xiv. Art du tuilier et du briquetier, par H. L. Duhamel du Monceau, C. R. Fourcroy de Ramecourt et Gallon; Art de fabriquer la brique et la tuile en Hollande, par G. Jars; Art de tirer des carrières la pierre d'ardoise, par A. D. Fougeroux de Bondaroy; Art de la maçonnerie, par Lucotte; Art du couvreur, par H. L. Duhamel du Monceau.

PARIS. Académie roy. des sciences—Cont'd.

T. xv-xix. Art du menuisier; Art du treillageur Art du layetier, par J. A. Roubo; Art du tonnelier, par A. D. Fougeroux de Bondaroy.

T. xx. Art du tourneur mécanicien, par Hulot.

T. xxi-xxii. Art du facteur d'orgues, par F. Bedos de Celles [better, J. F. Monniotte].

T. xxiii-xxviii. Art du fabricant d'étoffes de soie, par J. Paulet.

T. xxix. Art de faire des chapeaux, par J. A. Nollet; Art du perruquier, par F. A. P. de Garsault; Art du paumier-raquetier, et de la paume, par F. A. P. de Garsault; Art de la teinture en soie, par P. J. Macquer.

T. xxx. Art de la draperie, par H. L. Duhamel du Monceau; Art du fabricant d'étoffes en laine, par J. M. Roland de la Platière; Art de friser, ou ratiner les étoffes de laine, par H. L. Duhamel du Monceau; Art de faire les tapis, façon de Turquie, par H. L. Duhamel du Monceau; Art du fabricant de velours de coton, par J. M. Roland de la Platière.

T. xxxi. Art du tailleur, par F. A. P. de Garsault; Art de la lingère, par F. A. P. de Garsault; Art du brodeur, par de Saint-Aubin.

T. xxxii. Art du bourrelier et du sellier, par F. A. P. de Garsault; Art du cordonnier, par F. A. P. de Garsault.

T. xxxiii. Art de faire le papier; Art du cartonnier, par J. J. Le F. de Lalande; Art du cartier, par H. L. Duhamel du Monceau; Art de faire le parchemin, par J. J. Le F. de Lalande Art du cribler, par M. Fougeroux d'Angerville; Art du relieur doreur de livres, par M. Dudin.

T. xxxiv-xxxvi. Traité des pêches, par H. L. Duhamel du Monceau, et de La Marre.

T. xxxvii. Art du distillateur des eaux-fortes, etc. par J. F. Demachy.

T. xxxviii. Art du tanneur; Art du carroyeur Art de l'hongroyeur; Art du chamoiseur; Art de faire le maroquin; Art du mégissier, par J. J Le F. de Lalande; Art de travailler les cuirs dorés ou argentés, par A. D. Fougeroux de Bondaroy.

T. xxxix. Art du chandelier; Art du savonnier; Art du cirier, par H. L. Duhamel du Monceau.

T. xl. Art de raffiner le sucre, par H. L. Duhamel du Monceau; Art de l'indigotier, par M. de Beauvais-Raseau; Fabrique de l'amidon, par H L. Duhamel du Monceau; Art de faire les colles, par H. L. Duhamel du Monceau.

T. xli. Arts du meunier, du vermicellier et du boulanger, par P. J. Malouin.

T. xlii. Description et usage des principaux instruments d'astronomie, par P. C. Le Monnier; Nouvelle méthode pour diviser les instruments de mathématique et d'astronomie; Description d'un microscope et de différens micromètres, par F. d'Albert d'Ailly, duc de Chaulnes.

T. xliii. Art de faire les ressorts de montres, par W. Blakey, Amsterdam; Construction des théâtres et des machines théâtrales, par J. A. Roubo.

T. xliv. Art de la peinture sur verre et de la vitrerie, par P. Le Vieil.

Digitized by Google

PARIS. Académie roy. des sciences—Cont'd.

T. xiv. Construction des vaisseaux, par F. de Chapman, traduit du suédois; Art de la mâture, par C. Romme; Art de la voilure, par C. Romme.

——— ——— Arts et métiers. Descriptions des arts et métiers faites ou approuvées par messieurs de l'Académie royale des sciences de Paris. Avec figures. Nouvelle éd. Publiées avec des observations, et augmentées de tout ce qui a été écrit de mieux sur ces matières, en Allemagne, en Angleterre, en Suisse, en Italie; par J. E. Bertrand. T. 1–19. 4°. *Neuchâtel*, 1771–83.

CONTENTS.

Tome I. Art du meunier, du boulanger et du vermicellier, par P. J. Malouin.

T. ii. Art des forges, et fourneaux à fer, par G. Le C. de C. de Courtivron et E. J. Bouchu; Art du charbonnier, par H. L. Duhamel du Monceau.

T. iii. Art du tanneur; Art du chamoiseur; Art du mégissier; Art du carroyeur; Art du parcheminier; Art de l'hongroyeur; Art du maroquinier, par J. J. Le F. de Lalande; Art de travailler les cuirs dorés ou argentés, par A. D. Fougeroux de Bondaroy; Art du cordonnier; Art du paumier-raquetier, par F. A. P. de Garsault.

T. iv. Art du tuilier et du briquetier, par H. L. Duhamel du Monceau; C. R. Fourcroy de Ramecourt et Gallon; Art de tirer des carrières la pierre d'ardoise, par A. D. Fougeroux de Bondaroy; Art du couvreur, par H. L. Duhamel du Monceau; Art du chaufournier, par C. R. Fourcroy de Ramecourt; Art de faire le papier; Art du cartonnier, par J. J. Le F. de Lalande; Art du cartier, par H. L. Duhamel du Monceau.

T. v. Les trois premières sections du traité des pêches, et l'histoire des poissons, par H. L. Duhamel du Monceau et de La Marre.

T. vi. Art du serrurier; Art du chandelier, par H. L. Duhamel du Monceau; Art d'exploiter les mines de charbon de terre, par S. Morand.

T. vii. Art de la draperie; Art de friser ou ratiner les étoffes de laine; Art de faire les tapis, façon de Turquie, par H. L. Duhamel du Monceau; Art du chapelier, par J. A. Nollet; Art du tonnelier, par A. D. Fougeroux de Bondaroy; Art de convertir le cuivre en laiton, par Galon; Art de l'épinglier, par R. A. F. de Réaumur.

T. viii. Art de l'indigotier, par de Beauvais-Raseau; Art de la porcelaine, par N. C. de T. de Milly; Art du potier de terre; Art de faire les pipes; Art de faire les colles; Fabrique de l'amidon; Art du savonnier, par H. L. Duhamel du Monceau; Art du relieur, par Dudin.

T. ix. Six premières parties de l'art du fabricant d'étoffes de soie, par J. Paulet.

T. x. Deux premières sections de la seconde partie du traité des pêches, par H. L. Duhamel du Monceau et de La Marre.

PARIS. Académie roy. des sciences—Cont'd.

T. xi. Troisième section de la seconde partie du traité des pêches, par H. L. Duhamel du Monceau.

T. xii. Art du distillateur d'eaux-fortes; Art du distillateur liquoriste; Art du vinaigrier, par J. Demachy, avec des additions par M. Struve.

T. xiii. Art de la peinture sur verre et de la vitrerie, par P. Le Vieil; Art du plombier et fontainier, par C. M. de La Gardette.

T. xiv. Art du perruquier; Art du tailleur; Art de la lingère, par F. A. P. de Garsault; Art du brodeur, par de Saint-Aubin; Art du cirier, par H. L. Duhamel du Monceau; Art du criblier, par Fougeroux d'Angerville; Art du coutelier en ouvrages communs, par A. D. Fougeroux de Bondaroy; Art du bourrelier, et du sellier, par F. A. P. de Garsault; Art du mouleur en plâtre, par M. Fiquet.

T. xv. Fabrique des ancres, par R. A. F. de Réaumur; Forge des enclumes, par H. L. Duhamel du Monceau; Art d'adoucir le fer fondu, par R. A. F. de Réaumur; Art du faiseur de peignes d'acier pour la fabrique des étoffes de soie; Art de réduire le fer en fil; Art de raffiner le sucre, par H. L. Duhamel du Monceau; Méthode d'affiner l'argent, traduit de l'allemand.

T. xvi. Trois premières sections de la seconde partie de l'art d'exploiter les mines de charbon de terre, par S. Morand.

T. xvii. Quatrième section de la seconde partie de l'art d'exploiter les mines de charbon de terre, par S. Morand.

T. xviii. Table analytique des matières de l'art d'exploiter les mines de charbon de terre; Supplément à la notice des opérations tentées en Normandie et en Bourgogne, par S. Morand; Description d'un microscope et de différens micromètres; Méthode pour diviser les instrumens de mathématique et d'astronomie, par M. F. d'A. d'A. de Chaulnes.

T. xix. Les combinaisons mécaniques, par J. Botterman, traduit du hollandais par M. Feutry; Art de préparer et d'imprimer les étoffes en laines, suivi de l'art de fabriquer les pannes ou peluches, les velours, façon d'Utrecht, et les moquettes; Art du fabricant de velours de coton; Art du fabricant d'étoffes en laines; Art du tourbier, par J. M. Roland de la Platière.

——— Almanach des 500,000 adresses de Paris, etc. *See* Didot, Firmin, *frères*.

——— Concours agricole universel de Paris, en 1856. Contributions de l'agence centrale des échanges internationaux au concours. États-Unis, Sardaigne, Toscane, Mexique. 4°. *Paris*, 1856. pp. 8.

——— ——— Liste générale des récompenses décernées par les jurys. 8°. *Paris*, 1856. pp. 87.

——— Les eaux de Paris. *See* Dumont, A.

——— École impériale des ponts et chaussées. Catalogue des ouvrages anglais et

Digitized by Google

PARIS. École impériale, etc.—Continued. américains de la bibliothèque; par E. Schwebelé. [Classified with indexes.] 8°. *Paris*, 1856.

——— École royale polytechnique. Journal. T. 21. 4°. *Paris*, 1838-39.

——— Exposition, 1839. Rapport. *See* **Jobard**, J. B. A. M.

——— Exposition, 1844. Description méthodique, etc. *See* **Burat**, J.

——— ——— Rapport du jury central. 8°. *Paris*, 1844.

——— Exposition, 1849. Rapport du jury central sur les produits de l'agriculture et de l'industrie exposés. T. 1-3. 8°. *Paris*, 1850.

——— Exposition of 1855. Album de l'exposition de 1855. *See* **Brisse**, L.

——— ——— Commission impériale. Catalogue officiel, publié par ordre de la. 2e éd. 8°. *Paris*, 1855.

——— ——— ——— Système de classification, pour servir de base à la composition des collections des produits à exposer, au classement de ces produits dans le palais de l'exposition, et aux travaux du jury international; avec une instruction sur les règles à suivre pour choisir et grouper les objets à exposer. 8°. *Paris*, 1856.

——— ——— Étude des œuvres les plus remarquées. *See* **Laboulaye**, Charles P. L. **Art** industriel.

——— ——— La industria y las bellas artes en la exposicion. *See* **Escandon**, P.

——— ——— Der landwirthschaftliche Theil der Weltausstellung zu Paris im Jahre 1855. Ein Bilder-Album der neuesten und nutzbarsten Maschinen und Geräthe der Landwirthschaft. *See* **Hamm**, Wilhelm.

——— ——— Rapport sur. *See* **Napoléon**, *Prince*.

——— ——— Rapports du jury mixte international, publiés sous la direction de S. A. I. le prince Napoléon. T. 1-2. 4°. *Paris*, 1856.

——— ——— La Sicilia all'esposizione universale agraria di Parigi. *See* SICILY.

——— ——— Société impériale et centrale d'horticulture. Exhibition de 1855. Procés-verbaux des séances du jury, etc. *See* PARIS. **Société** impériale.

——— ——— Tasmanian contributions. *See* TASMANIA.

PARIS. Exposition, 1855. Travail universel; revue des œuvres exposées à Paris. *See* **Arnoux**, J. J.

——— ——— Visite à l'exposition. *See* **Tresca**.

——— ——— Visites et études au palais de l'industrie. *See* **Pascal**, A.

——— ——— A walk through the exhibition. *See* **Walk** through the exhibition.

——— Exposition of 1867. Catalogue of the British section; containing a list of the exhibitors of the United Kingdom and its colonies, and the objects which they exhibit. *See* GREAT BRITAIN. **Commission**; Paris exhibition.

——— ——— Notices sur les collections, cartes et dessins relatifs au service du corps impérial des mines. *See* FRANCE.

——— ——— Notices sur les modèles, cartes et dessins relatifs aux travaux publics. *See* FRANCE.

——— ——— Rapports du jury international. Publiés sous la direction de M. Michel Chevalier. T. 1-13. 8°. *Paris*, 1868.

——— ——— Reports of United States commissioners. *See* UNITED STATES. **State** department.

——— ——— Revue de l'exposition. Mines, métallurgie, chimie, mécanique, navigation, chemins de fer, constructions, sciences et arts, appliqués à l'industrie. 4 v., with 3 v. of plates. 8°. *Paris et Liége*, 1867-70.

——— fashions, Monthly report of. *See* **Bon Ton**.

——— Librairie française. Catalogue. *See* **Lorenz**, Otto.

——— Musée des produits de l'industrie française, 1819, Description du. *See* **Le Normand**, L. S., and **Moléon**, J. G. V. de. **Annales** de l'industrie française.

——— Muséum d'histoire naturelle. Mémoire des professeurs-administrateurs en réponse au rapport fait en 1858. Par une commission chargée d'étudier l'organisation de cet établissement. 4°. *Paris*; 1863-64. [2 copies.]

——— The parks, promenades and gardens of. *See* **Robinson**, W.

——— La Société chimique. Bulletin. Par Charles Barreswil. Années 1861-63; nouvelle série, T. 1-27, 1864-77. 8°. *Paris*, 1861-77——.

——— ——— Same. Tables, 1858-1874. 8°. *Paris*, 1875.

Digitized by Google

PARIS. La Société chimique. Répertoire de chimie appliquée. Compte rendu des applications de la chimie en France et à l'étranger. Par Charles Louis Barreswil. T. 1–5, 1859–63. 8°. *Paris*, 1859–63.

——— ——— Répertoire de chimie pure et appliquée. Compte rendu des progrès de la chimie pure en France et à l'etranger. Par Adolphe Wurtz. T. 1–4, 1858–62. 8°. *Paris*, 1868–62.

——— La Société d'acclimatation. Bulletin. 1e série, T. 1, 2, 9, 10, 1854–63; 2e série, T. 2–10, 1865–73; 3e série, T. 1–3, 1874-76. 8°. *Paris*, 1854–76——.

——— La Société d'agriculture du département de la Seine. Mémoires d'agriculture, d'économie rurale et domestique. T. 1–16, 1800–12. 8°. *Paris*, 1800–12.

——— La Société d'encouragement pour l'industrie nationale. Bulletin. T. 1–65, 1802–66. [Appendix to v. 49, 1850, "Histoire de la fondation de la société".] 4°. *Paris*, 1850.

——— La Société française de photographie. Bulletin. T. 1–9. 8°. *Paris*, 1855–63.

——— La Société impériale et centrale d'horticulture. Exposition universelle de 1855. Procès-verbaux des séances du jury, précédés de la liste générale des exposants, et suivis du rapport de la section des arts et industries, du compte rendu de la séance de distribution des récompenses, du rapport d'ensemble sur l'exposition, et de la table alphabétique des plantes et produits végétaux. 8°. *Paris*, 1857.

——— ——— Napoléon III protecteur. Journal. T. 5–9. 8°. *Paris*, 1859–63.

——— La Société polytechnique. Recueil industriel, manufacturier et commercial, de la salubrité publique, des beaux-arts, et des actes de l'administration. Répertoire général des brevets d'invention, et description des expositions publiques, rédigé par J. G. V. de Moléon et M. A. Jullien. T. 13; 2e série, T. 5; 3e série, 11e, 13e année, 1837–39. [Containing, also, "Description de l'exposition de 1839".] 8°. *Paris*, 1837–39.

PARISIAN blue. Fabrikation des Pariserblaus. *See* **Rösling**, C. W. **86 Neuer Schauplatz der Künste.**

Park, Roswell. Pantology; or a systematic survey of human knowledge, proposing a classification of all its branches, and illustrating their history, relations, uses, and objects. 8°. *Philadelphia*, 1841.

Park, Roswell—Continued.

Parke, B., and **Johnson,** O. F. A digest of the laws of Pennsylvania, from 1830 to 1835. 8°. *Harrisburg*, 1836.

Parke, Uriah. Lectures on the philosophy of arithmetic, and the adaptation of that science to the business purposes of life. 12°. *Philadelphia*, 1849.

Parker, Charles. Villa rustica: selected from buildings and scenes in the vicinity of Rome and Florence; arranged for rural and domestic dwellings. *Illus.* 4°. *London*, 1848.

Parker, Foxhall A. Fleet tactics under steam. 24°. *New York*, 1870.

——— The naval howitzer afloat. 8°. *New York*, 1866.

Parker, John A. The quadrature of the circle, containing demonstrations of the errors of geometry in finding the approximation in use. roy. 8°. *New York*, 1851.

Parker, Samuel. Journal of an exploring tour beyond the Rocky Mountains, under the direction of the A. B. C. F. M.; containing a description of the geography, geology, climate, productions of the country, and the numbers, manners and customs of the natives: with a map of Oregon territory. *Illus.* 4th ed. 12°. *Ithaca, N. Y.*, 1844.

Parkes, *Mrs.* Encyclopædia of domestic economy. *See* **Webster,** T.

Parkes, Samuel. Chemical essays; relating principally to the arts and manufactures of the British dominions. 5 v. 12°. *London*, 1815.

——— Manuel de chimie amusante. *See* **Accum,** F., **Parkes,** S., and **Griffin,** J. **6 Manuels Roret.**

Parkinson. Complete confectioner, pastry cook and baker; with additions by. *See* **Complete** confectioner.

Parkinson, John. Theatrum botanicum. The theater of plants, or an herball of large extent, containing therein a more ample and exact history and declaration of physicall herbs and plants than are in other authors; collected by. fol. *London*, 1640.

Parkinson, S. A treatise on optics. 3d ed. rev. 12°. *London*, 1870.

Parkman, Francis. The book of roses. 12°. *Boston*, 1866.

Digitized by Google

PARLIAMENTARY law, A digest of. *See* **Wilson**, O. M.

Parmly, Eleazar. Dentologia, etc. *See* **Brown**, Solyman. **American library of dental science, v 2.**

—— The natural history of the human teeth. *See* **Hunter**, John. **American library of dental science, v. 1.**

Parnell, Edward Andrew. Applied chemistry; in manufactures, arts and domestic economy. v. 1. Preliminary observations; gas illumination; preservation of wood; dyeing and calico-printing. v. 2. Manufacture of glass; starch; tanning; caoutchouc, its properties and applications; borax and the boracic lagoons; soap; sulphur and sulphuric acid; soda manufacture. Ed. by. 8°. *London*, 1844.

—— Elements of chemical analysis; qualitative and quantitative. New ed. 8°. *London*, 1845.

Parrish, Edward. An introduction to practical pharmacy; with many formulas and prescriptions. *Illus.* 8°. *Philadelphia*, 1856.

—— A treatise on pharmacy, designed as a textbook for the student, and as a guide for the physician and pharmaceutist. 3d ed. roy. 8°. *Philadelphia*, 1867.

Parsey, Arthur. The art of miniature painting on ivory. 18°. *London*, 1831.

Parsons, Samuel B. On the rose; a treatise on the propagation, culture and history of the rose. New ed. 12°. *New York*, 1869.

PARTHENOGENESIS, Ueber. *See* **Siebold**, C. T. E. von.

Partington, Charles F. The British cyclopædia of the arts and sciences. 2 v. 8°. *London*, 1833-35.

—— Century of inventions; with explanatory notes, and a biographical memoir by. *See* **Somerset**, E.

—— The clock and watchmaker's complete guide: comprehending the early history of the art; its progressive improvement and present state, theoretical and practical. *Illus.* 8°. *London*, 1825.

—— An historical and descriptive account of the steam engine; comprising a general view of the various modes of employing elastic vapour, as a prime mover in mechanics. 8°. *London*, 1826.

—— London journal of arts and sciences; ed. by. *See* **London** journal.

Parton, James. Life and times of Benjamin Franklin. 2 v. 12°. *Boston*, 1866.

—— Smoking and drinking. 24°. *Boston*, 1868.

Partridge, William. On practical agriculture; or an attempt to reduce the theory and practice to the comprehension of the operator. 12°. *New York*, 1849.

PARTURITION. *See* **Obstetrics.**

Parville, Henri de. Causeries scientifiques, découvertes et inventions, progrès de la science et de l'industrie. An. 1-5. 12°. *Paris*, 1862-66.

Pascal, Adrien. Visites et études de S. A. I. le prince Napoléon au palais de l'industrie, ou guide pratique et complet à l'exposition universelle de 1855. 12°. *Paris*, 1855.

Pasley, C. W. Observations on limes, calcareous cements, mortars, stuccos, and concrete, and on puzzolanas, natural and artificial; together with rules deduced from numerous experiments for making an artificial water cement. 8°. *London*, 1838.

Pasley, T. H. A theory of natural philosophy on mechanical principles, divested of all immaterial chymical properties; showing for the first time, the physical cause of continuous motion. 8°. *London*, 1836.

Passa, Jaubert de. Voyage en Espagne dans les années 1816-1819. 8°. *Paris*, 1823.

Passavant, T. Treatise on American engineering; Division C, Locomotives, by. *See* **Mone**, F.

PASSENGER laws of the United States. *See* **Bromwell**, W. J. **History** of immigration.

Passow, Franz. Greek-English lexicon, based on the German work of. *See* **Liddell**, H. G., and **Scott**, R.

PASTEBOARD. Abridgments English Patents, Nos. 11, 12.

—— Anleitung zur Verfertigung aller Arten Papparbeiten. *See* **Vollständiges. 59 Neuer Schauplatz der Künste.**

—— Art du cartonnier. Par J. J. le F. de Lalande. PARIS. **Acad. roy. des sc.; arts et métiers, v. 33 and 34.**

—— Manuel du cartonnier. *See* **Lebrun. 85 Manuels Roret.**

PASTEL, or woad, A treatise on. *See* **Lasteyrie**, C. P. de.

Digitized by Google

PASTEL painting, The art of. *See* **Jozan, S.**

Pasteur, M. L. Études sur le vinaigre; sa fabrication, ses maladies, moyens de les prévenir; nouvelles observations sur la conservation des vins par la chaleur. 8°. *Paris,* 1868.

PASTORAL life and manufactures of the ancients. *See* **Gilroy,** Clinton G.

Patuille, J., and **Huguet,** A. Code international, ou la propriété industrielle, artistique et littéraire; avec appendice. 8°. *Paris,* 1855-65.

PATENT cases and decisions. *See, also,* UNITED STATES. **Interior dept. Patent office.**

ANDREWS, W. D., Decision on the matter of, for an extension of his letters patent, for an improvement in centrifugal pumps. *See* **Thomas,** P. F.

BACON vs. CHAMBERS. Report of the case in equity, before the United States circuit court, district of Massachusetts, May 6, 1859. *See* **Bacon,** Steuben T.

BIGELOW, I. T., In the matter of the application of, for extension and renewal of patent to Samuel Nicolson. *See* **Nicolson,** Samuel.

BROOKS et al., administrators of William Woodworth, and James G. Wilson, vs. Fiske and Norcross. Report of trial. *See* **Brooks,** Artemas L., and others.

BURR, H. A., et al. vs. G. E. COWPERTHWAITE Opinion. *See* **Ingersoll,** C. A.

DAY et al. vs. STELLMAN et al. Opinion of Judge Giles and decision on final hearing, delivered at Baltimore, July 20, 1859. *See* **Giles,** W. F.

EMERY and JOHNSON, Interference between the application of, and the patent granted to J. E. A. Gibbs. Argument of counsel. *See* **Pollak,** A.

FARLEY, H. W., Interference between the application of, and the patent of E. G. Allen, for an improvement in steam pressure gauges. Argument of counsel. *See* **Robb,** J. B.

—— and the assignees of E. G. ALLEN, Interference between. *See* **Mason,** C.

FRENCH et al. vs. ROGERS et al. [Electric telegraph.] *See* **French,** B. B.

GALLAGHER, J. S. For patent for machine for folding paper. Argument on appeal. *See* **Stansbury,** Charles F.

GOODYEAR, C., Application of, for extension of letters patent for an improvement in India rubber fabrics. Argument against said extension. *See* **Stoughton,** E. W.

—— Application of, for extension. Decision of the commissioner, and order of extension. *See* **Holt,** J.

—— Application of, for extension of letters patent for an improvement in manufacture of India rubber fabrics. Report of examiner. *See* **Antisell,** T.

—— vs. DAY. Infringement. Bill in equity. *See* **Goodyear,** C.

HAGAN and GROOM, Interference between, for improvement in stoves. *See* **Keller,** C. M.

HARTSHORN, Isaac, et al., plaintiffs in error, vs. Horace H. DAY. *See* **Hartshorne,** Isaac.

HUSBAND, J. S., Improvement in propellers, by. Argument. *See* **Titus,** J.

HUSSEY, Obed. Reaping machines. Review of the pamphlet of Fitzgerald in opposition to the extension of the patent of; and, also, of the defence on evidence in favor of said extension, with a brief history of reaping machines, and an examination of the claims for priority of invention. *See* **Review.**

HYATT, T. Applicant's testimony for an extension for an illuminating vault cover. *See* **Hyatt,** T.

—— Application of, for extension for illuminating vault covers. Argument. *See* **Keller,** C. M.

KERAVEN and RACEY, Argument and testimony in the matter of the cross opposition of, to the grant of her majesty's royal letters patent, on improvements in lamps, etc. *See* **Serrell,** L. W.

KIDD vs. SPENCE et al. Opinion of Judge Ingersoll. *See* **Kidd,** W. E.

LARROWE, A., Argument of counsel in the appeal of, from the decision of W. D. Bishop, commissioner of patents, rejecting his application for a patent for an improvement in self-acting carriage brakes. *See* **Dodge,** T. H.

MCCORMICK, Application of, for extension of his patent, for an improvement in reaping machines. *See* UNITED STATES. **Interior** dept. Patent office.

MCCORMICK, C. H., Opinion in the matter of the application of, for an extension of patent for reaping machines. *See* **Holt,** J.

—— Argument in opposition to the extension of patent for improvement in reaping machines. *See* **Lawrence,** D. C., and **Fenwick,** R. W.

—— vs. MANNY and others. Infringement: opinion of Mr. Justice McLean. *See* **McLean,** J.

—— vs. TALCOTT et al. Appeal. *See* **McCormick,** C. H.

MATTINGLY vs. Washington and Alexandria steamboat co. Navy of the United States; an exposure of its condition, and the causes of its failure; contained in a speech in the case of. *See* **Dickerson,** Edward N.

MAYNARD, *Dr.,* Argument in the appeal from the decision of Hon. P. F. Thomas, refusing a patent to, for his fire arms. *See* **Robbins,** Z. C.

MORSE, S. F. B., Decision on the application of, for an extension of his patent for a new and useful improvement in electro-magnetic telegraphs. *See* **Thomas,** P. F.

NEWTON vs. The Grand Junction railway co. Infringement. Notes of the cause between. *See* **Newton,** W. E.

NICOLSON pavement company vs. C. E. JENKINS. Transcript of record. *See* **Nicolson,** Samuel.

PALMER and NUGENT, Interference between. Application in regard to fire-arms: argument. *See* **How,** T. P.

Digitized by Google

PATENT cases and decisions—Continued.

PALMER, B. F. The Palmer leg, report of examiner, and decision of the commissioner, extending the patent for. *See* **Palmer**, B. F.

—— —— Argument before the commissioner of patents, by C. F. Stansbury. Extension of patent for. *See* **Palmer**, B. F.

POTTER, Orlando B., and WHEELER, N., vs. James G. WILSON and others. Decisions in the sewing machine cases. United States circuit court, southern district of New York. *See* **Nelson**, S., and **Smalley**, D. A.

PHELPS, A. G., and others, admrs. New England car spring co. vs. C. GOODYEAR. Motion for a preliminary injunction. *See* **Phelps**, A. G.

SILSBY, RACE, and others, appellants, vs. Elisha FOOT, appellee. *See* **Silsby**.

WELLS, E., Decision on application of, for an extension of the patent of H. A. Wells, for improvements in forming and hardening hat-bodies. *See* **Thomas**, P. F.

WICKERSHAM, W., Report in the matter of application of, for a patent for improvement in sewing machines, on interference with I. M. Singer. *See* **Little**, A. B., and **Lawrence**, D W. C.

WILSON, J. G., Decision in the matter of appeal of, assignee of Akin and Felthousen, from the decision of the commissioner of patents in favor of Wheeler, Potter et als., assignees of A. B. Wilson. *See* **Dunlop**, J.

WILSON vs. ROUSSEAU and EASTON, Opinion of Mr. Justice Woodbury in the case of, upon the construction of the last clause of the 18th section of the patent act of 1836. *See* **Woodbury**, L.

WINANS vs. EATON et al. For an alleged infringement of his patent for the eight-wheel railroad car. Argument of W. Whiting. *See* **Whiting**, W.

—— Infringement of Ross Winans' patent railroad car. Arguments of W. W. Hubbell. *See* **Hubbell**, W. W.

—— Motion for injunction. *See* **Winans**, Ross.

—— —— Collection of patent cases in the courts of the United States. *See* **Robb**, J. B.

—— —— Collection of the most important cases respecting patents of invention, and the rights of patentees. *See* **Davies**, J.

—— —— Decisions of the commissioner of patents, 1869–1876. *See* UNITED STATES. **Interior** dept. Patent office.

—— —— Digest of American cases relating to patents for inventions and copyrights, from 1789 to 1862. *See* **Law**, S. D.

—— —— Digest of reported cases, relating to the law and practice of letters patent for inventions, decided from the passing of the statute of monopolies to the present time. *See* **Higgins**, Clement.

PATENT cases, Law reports of. *See* **Carpmael**, W.

—— —— Reports and notes of cases. *See* **Webster**, T.

—— —— Reports of cases for inventions determined in the circuit courts of the United States. *See* **Fisher**, Samuel S.

—— —— Reports of cases relating to letters patent for inventions. *See* **Macrory**, E.

—— congress. Internationaler Patent-Congress. Von Carl Th. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

—— decisions. *See* **Patent** cases and decisions.

—— journal and inventor's magazine. Ed. by Charles Barlow and E. J. Payne. v. 1–12. 8° and 4°. *London*, 1846–51.

—— law. Act for amending the law for granting patents for inventions. *See* GREAT BRITAIN. **Letters** patent.

—— —— Act to substitute stamp duties for fees, and to provide for the purchase of indexes. *See* GREAT BRITAIN. **Letters** patent.

—— —— Action of patent laws in promoting invention. *See* **Abel**, C. D.

—— —— Amendment of the law and practice of letters patent. *See* **Webster**, T.

—— —— Analysis of. *See* **Rankin**, R. R.

—— —— and practice. *See* **Whitman**, Charles Sidney.

—— —— Bill to amend the several acts now in force. 1857. *See* UNITED STATES. **Congress.**

—— —— Code des patentes contenant la loi de 1844, annotée, article par article, des motifs qui l'ont fait adopter, des discussions dont elle a été l'objet, etc. *See* FRANCE. **Nouveau** code des patentes.

—— —— Collection of the laws of patents. *See* **Loosey**, C. F.

—— —— Copyright and patent law of the United States, 1790–1866. *See* **Law**, Stephen D.

—— —— Digest of the laws of New Brunswick, relating to letters patent. *See* **Stubs**, P.

—— —— Du régime de l'invention. Examen des améliorations proposées à la législation relative aux inventions. *See* **Breulier**, A., and **Gardissal**, C. D.

Digitized by Google

PATENT law, English and French. By C. Egan. *See* **Weale's papers on engineering, v. 4.**

—— —— Epitome of the law as altered by statute 5. and 6. W. 4. c. 83. *See* **Smith**, J. W.

—— —— Essay on. *See* **Fessenden**, T. G.

—— —— Essay on the law of patents for new inventions; to which are prefixed two chapters on the general history of monopolies, etc. *See* **Collier**, J. D.

—— —— French law and practice. *See* **Perpigna**, A.

—— —— Geist der österreichischen Gesetzgebung, zur Aufmunterung der Erfindungen im Fache der Industrie. *See* **Krauss**, A. v.

—— —— Handbuch der Gesetze über ausschliessende Privilegien auf neue Erfindungen. *See* **Schuller**, A.

—— —— Handy book of patent and copyright law, English and foreign. *See* **Fraser**, J.

—— —— A handy-book on the law and practice of patents for inventions; and registration of designs, with rules, forms and statutes; and directions respecting foreign patents. *See* **Byrne**, J. P.

—— —— Instructions à l'usage des inventeurs. *See* **Armengaud**, C., and **Mathieu**, J.

—— —— Die internationale Patentgesetzgebung. *See* **Kleinschrod**, C. T. v.

—— —— Inventor's manual. *See* **Danson**, J. T., and **Dempsey**, G. D.

—— —— Inventor's manual of legal principles, and guide to the patent office. *See* **Curtis**, George Ticknor.

—— —— Law and practice of letters patent for inventions; statutes, practical forms and digest of reported cases. *See* **Webster**, T.

—— —— Law and practice of patents, and registration of designs. *See* **Billing**, S., and **Prince**, A.

—— —— Law and practice relating to letters patent. *See* **Agnew**, William Fischer.

—— —— Law and practice relating to letters patent. *See* **Norman**, J. P.

—— —— The law of patents and registration. *See* **Turner**, T.

—— —— The law of patents for inventions, familiarly explained. *See* **Carpmael**, W.

PATENT law. The law of patents for inventions, including the remedies and legal proceedings in relation to patent rights. *See* **Phillips**, W.

—— —— The law of patents in the United States. *See* **Curtis**, G. T.

—— —— Law relating to patent privileges, and the practice of obtaining letters. *See* **Hindmarch**, W. M.

—— —— Laws in foreign countries. *See* **Urling**, R. W.

—— —— Laws of the United States; decisions of courts; opinions of Cranch on appeals, etc. *See* UNITED STATES. **Interior** dept. Patent office.

—— —— Législations française et étrangères sur les brevets d'inventions. *See* **Gardissal**, and **Gardissal**, C. D.

—— —— Letters and suggestions on the amendment of the laws relating to patents for inventions. *See* **Newton**, M.

—— —— L'inventeur breveté; code des inventions et des perfectionnements. *See* **Blanc**, É.

—— —— Loi des patentes anglaises, 1 oct. 1852: loi française, 5 juil. 1844, etc. *See* **Gardissal**.

—— —— The new patent law; its history, objects and provisions; the protection of invention acts, etc. *See* **Webster**, T.

—— —— Observations on the defects of the patent laws of this country; with suggestions for their reform. *See* **Hindmarch**, W. M.

—— —— Observations on the patent laws. *See* **Edwards**, F., *jr.*

—— —— Observations sur le projet de loi concernant les brevets d'invention. *See* **Perpigna**, A.

—— —— of Austria, March 31, 1832. *See* AUSTRIA.

—— —— of 1852, English. Suggestions as to the form of printing specifications. *See* **Prosser**, R.

—— —— of the United States, by the commissioner of patents. *See* UNITED STATES. **Interior** dept. Patent office.

—— —— Operation of the patent laws, with suggestions for their better administration. *See* **Newton**, A. V.

—— —— Patent office and patent laws, or a guide to inventors. *See* **Moore**, J. G.

—— —— Patentee's manual. A treatise on the law and practice of letters patent. *See* **Johnson**, J. and J. H.

Digitized by Google

PATENT law. Das Patentgesetz für das deutsche Reich. *See* **Dambach**, Otto.

——— ——— Patents, trade-marks and copyrights: consisting of the sections of the revised statutes of the United States, with notes under each section, referring to the decisions of the courts and the commissioner of patents, together with rules of the patent office and selection of forms. *See* **Bump**, Orlando F.

——— ——— Present state of. *See* **Spence**, W.

——— ——— Proceedings relating to the patent laws. *See* **British** association for the advancement of science.

——— ——— Projet de loi sur la propriété industrielle. *See* BELGIUM.

——— ——— Property in designs and inventions. *See* **Webster**, T.

——— ——— Report and evidence on the law touching letters patent. *See* GREAT BRITAIN. **Letters** patent.

——— ——— Rules and regulations, 1852. *See* GREAT BRITAIN. **Letters** patent.

——— ——— Rules and regulations for passing letters patent for inventions. *See* GREAT BRITAIN. **Great** seal patent office.

——— ——— Scientific evidence and patentable invention. *See* **Spence**, W.

——— ——— Statute laws relating to patents. *See* **Law**, S. D.

——— ——— Substantive laws relating to letters patent. *See* **Lund**, H.

——— ——— Summary of patent law and of extensions. *See* **Wordsworth**, C.

——— ——— Supplement to a treatise on the law of patents, and an abstract of the laws in force in America, Spain, Austria, the Netherlands, and France. *See* **Godson**, R.

——— ——— Synopsis of the patent laws of various countries. *See* **Tolhausen**, A.

——— ——— Traité de la contrefaçon en tous genres. *See* **Blanc**, E.

——— ——— Transmissions of certified copies of letters patent and specifications. *See* GREAT BRITAIN. **Letters** patent.

——— ——— Treatise on the law relating to patent privileges. *See* **Hindmarch**, W. M.

——— ——— Treatise on. *See* **Curtis**, G. T.

——— ——— Treatise on. *See* **Godson**, R.

PATENT law. Treatise on the laws of letters patent for the sole use of inventions in the United Kingdom. *See* **Coryton**, J.

——— ——— Verordnung, die Ertheilung von Patenten betreffend. *See* SAXONY.

——— office. *See, also*, UNITED STATES. **Interior** dept. Patent office; **Patents** and other privileges; *and* **Patents** for inventions.

——— ——— Great seal. Catalogue of the library. *See* GREAT BRITAIN. **Great** seal patent office.

——— ——— Great seal. Library and museum. Report from the select committee on. *See* GREAT BRITAIN. **Report.**

——— ——— United States. Catalogue showing the location of every model of patented inventions in the new hall. *See* UNITED STATES. **Interior** dept. Patent office.

——— ——— ——— Digests of patents, from 1790 to 1841. *See* UNITED STATES. **Interior** dept. Patent office.

——— ——— ——— Guide to. *See* **Curtis**, G. Ticknor.

——— ——— ——— List of patents for inventions and designs issued by the United States from 1790 to 1847. *See* UNITED STATES. **Interior** dept. Patent office.

——— ——— ——— Official gazette of. *See* UNITED STATES. **Interior** dept. Patent office.

——— ——— ——— Reports of, 1837–71. *See* UNITED STATES. **Interior** dept. Patent office.

——— ——— ——— Specimen of a new plan of publishing the annual reports of. *See* **Gritzner**, M. C.

PATENTS and other privileges for inventions in various countries.

AUSTRIA. Beschreibung der Erfindungen und Verbesserungen. In 14 Klassen. Jahre 1821–47. [Bound in 6 v.; plates in 3 v. separate.]

B. 1. 1821–35. B. 4. 1843–45.
B. 2. 1836–40. B. 5. 1845–46.
B. 3. 1841–43. B. 6. 1846–47.

——— *See, also*, AUSTRIA.

BELGIUM. Recueil special des brevets d'inventions. [In 20 categories to T. 4; afterwards in 7.] 1854–76——. [23 v. text; 6 v. plates.]

T. 1. June, 1854, to July, 1855.
2. July, 1855, to July, 1856.
3. July, 1856, to July, 1857.
4. July, 1857, to July, 1858.
5. July, 1858, to July, 1859.
6. July, 1859, to Dec., 1859.
7. 1860. T. 9. 1862.
8. 1861. 10. 1863.

Digitized by Google

PATENTS—Continued.

BELGIUM.

T. 11. 1864.
12. 1865.
13. 1866.
14. 1867.
15. 1868.
16. 1869.
17. 1870.
18. 1871.
19. 1872.
20. 1873.
21. 1874.
22. 1875.
23. 1876.

PLATES.

T. 1– 4 (1 v.) 1854–1858.
5– 8 (1 v.) 1858– 61.
9–11 (1 v.) 1862– 64.
12–14 (1 v.) 1865–1867.
15–18 (1 v.) 1868– 71.
19–22 (1 v.) 1872– 75.

——— *See, also,* BELGIUM.

CANADA. Patents of Canada. 2 v. 1824–55. v. 1, Specifications Nos. 1–258, 1824–49; v. 2, Specifications Nos. 259–489, 1849–55.

——— The Canadian patent office record. Monthly. 1873–76——. [Plates bound with text.]

v. 1. No. spec. 1645–3243. 1873.
2. 3244–4129. 1874.
3. 4130–5405. 1875.
4. 5406–6784. 1876——.

——— *See, also,* CANADA.

FRANCE. Descriptions des machines et procédés consignés dans les brevets d'invention de perfectionnement et d'importation. 1e série, T. 1–93, 1791–1844. Texte, 4°; pl., fol. 2e série, loi de 1844. T. 1–87, 1844–63. xx classes. Texte, 4°; pl., fol. 3e série, T. 1–11, 1871–74. Texte et pl., 4°. [In all these series, the plates are bound separately; in the 1st, 2 v. in 1.]

(The patents not being published chronologically, the years covered by each volume are given approximately.)

1e série.

Tome.	Specifications.	Annee.
1	1– 51	1791–1796
2	52– 153	1791–1806
3	154– 222	1802– 06
4	223– 326	1801– 08
5	327– 405	1800– 16
6	406– 497	1800– 17
	498– 593	1802– 15
8	594– 693	1803– 15
9	694– 824	1806– 17
10	825– 959	1806– 18
11	960– 1070	1809– 22
12	1071– 1161	1810– 22
13	1162– 1250	1804– 24
14	1251– 1357	1806– 23
15	1358– 1438	1812– 23
16	1439– 1491	1813– 23
17	1492– 1598	1813– 25
18	1599– 1664	1813– 25
19	1665– 1728	1814– 25
20	1729– 1792	1815– 28
21	1793– 1901	1809– 26
22	1902– 2000	1816– 28
23	2001– 2119	1817– 30
24	2120– 2234	1817– 28
25	2235– 2326	1817– 28
26	2327– 2426	1818– 29
27	2427– 2555	1818– 31

PATENTS—Continued.

FRANCE.

Tome.	Specifications.	Annee.
28	2556– 2688	1819–1830
29	2689– 2805	1820– 30
30	2806– 2930	1819– 31
31	2931– 3046	1821– 32
32	3047– 3148	1820– 33
33	3149– 3295	1821– 37
34	3296– 3372	1821– 34
35	3373– 3500	1822– 34
36	3501– 3614	1822– 35
37	3615– 3750	1823– 37
38	3751– 3895	1823– 38
39	3896– 4046	1824– 36
40	4047– 4207	1824– 37
41	4208– 4368	1825– 38
42	4369– 4555	1825– 38
43	4556– 4723	1825– 38
44	4724– 4919	1826– 38
45	4920– 5080	1826– 38
46	5081– 5252	1826– 39
47	5253– 5464	1827– 39
48	5465– 5675	1825– 38
49	5676– 5910	1828– 41
50	5911– 6080	1828– 38
51	6081– 6252	1828– 40
52	6253– 6449	1829– 41
53	6450– 6649	1829– 41
54	6650– 6870	1829– 42
55	6871– 7024	1829– 42
56	7025– 7217	1830– 40
57	7218– 7427	1830– 42
58	7428– 7655	1830– 43
59	7656– 7871	1830– 44
60	7872– 8052	1831– 43
61	8053– 8256	1831– 45
62	8257– 8456	1831– 44
63	8457– 8624	1831– 44
64	8625– 8824	1831– 42
65	8825– 9027	1831– 42
66	9028– 9213	1832– 44
67	9214– 9369	1833– 43
68	9370– 9537	1833– 43
69	9538– 9716	1833– 44
70	9717– 9898	1833– 44
71	9899–10086	1834– 44
72	10087–10229	1834– 45
73	10230–10350	1834– 44
74	10351–10471	1835– 40
75	10472–10594	1835– 41
76	10595–10707	1835– 41
77	10708–10816	1836– 42
78	10817–10930	1836– 42
79	10931–11053	1836– 43
80	11054–11174	1836– 44
81	11175–11296	1836– 43
82	11297–11441	1837– 43
83	11442–11579	1838– 44
84	11580–11697	1835– 44
85	11698–11824	1837– 44
86	11825–11916	1837– 40
87	11917–12017	1840– 41
88	12018–12082	1840– 42
89	12083–12184	1840– 42

Digitized by Google

PATENTS—Continued.

FRANCE.

Tome.	Specifications.	Annee.
90	12185–12271	1840–1847
91	12272–12389	1842– 44
92	12390–12497	1842– 47
93	12498–12543	1843– 49

2e série.

Tome.	Specifications.	Annee.
1	1– 227	1844
2	228– 434	1844–1845
3	435– 665	1845
4	666– 929	1845
5	930– 1319	1845
6	1320– 1739	1845–1846
7	1740– 2033	1845– 46
8	2034– 2266	1846
9	2267– 2599	1846–1847
10	2600– 2856	1846– 47
11	2857– 3088	1847
12	3089– 3563	1847–1848
13	3564– 3867	1847– 48
14	3868– 4122	1848– 49
15	4123– 4413	1848– 49
16	4414– 4785	1848– 50
17	4786– 5147	1848– 50
18	5148– 5500	1849– 51
19	5501– 5853	1850– 51
20	5854– 6256	1850– 51
21	6257– 6598	1850– 52
22	6599– 6934	1851– 52
23	6935– 7251	1851– 52
24	7252– 7629	1851– 52
25	7630– 7921	1851– 53
26	7922– 8229	1852– 53
27	8230– 8493	1852– 53
28	8494– 8920	1852– 53
29	8921– 9155	1852– 53
30	9156– 9317	1852– 53
31	9318– 9591	1852– 53
32	9592– 9806	1853– 54
33	9807– 9957	1853– 54
34	9958–10277	1853– 54
35	10278–10477	1853– 54
36	10478–10723	1853– 54
37	10724–10973	1853– 54
38	10974–11200	1853– 54
39	11201–11447	1854
40	11448–11745	1854
41	11746–12015	1854– 55
42	12016–12217	1854– 55
43	12218–12487	1854– 55
44	12488–12699	1854– 55
45	12700–12947	1854– 55
46	12948–13156	1855
47	13157–13367	1855
48	13368–13637	1855
49	13638–13905	1855
50	13906–14176	1855
51	14177–14405	1855
52	14406–14684	1855
53	14685–15057	1855–1856
54	15058–15538	1856
55	15539–15923	1856
56	15924–16385	1856
57	16386–16789	1856

PATENTS—Continued.

FRANCE.

Tome.	Specifications.	Annee.
58	16790–17049	1856
59	17050–17482	1856–1857
60	17483–17946	1857
61	17947–18308	1857
62	18309–18671	1857
63	18672–19067	1857
64	19068–19512	1857
65	19513–19937	1857–1858
66	19938–20404	1857– 58
67	20405–20844	1858
68	20845–21371	1858
69	21372–22002	1858
70	22003–22610	1858–1859
71	22611–23144	1858– 59
72	23145–23889	1859
73	23890–24483	1859–1860
74	24484–25147	1860
75	25148–25680	1860
76	25681–25886	1860
77	25887–26431	1860
78	26432–26928	1860
79	26929–27046	1860

Tome.	Classes.	Annee.
80	i–viii	1861
81	ix–xx	1861
82	i–v, xiii	1862
83	ix, x, xiv, xvi–xx	1862
84	vi–vii, xi, xii, xv	1862
85	i, viii, xiv, xvi, xviii	1863
86	ii, ix, xii, xiii, xv, xvii, xx	1863
87	iii, v, vi	1863

3e série.

Tome.	Annee.	Tome.	Annee.
1	1871	5	1872
2	1871	6, 8	1873
3	1872	10, 11, 12	1874
4	1872		

—— Same. Catalogues of names. 1791–1863. 39 v.

—— Same. Indices. 1e série, T. 1–40; 2e série, T. 1–20, 21–40, 61–79.

—— Same. Manuscript index in English of the 1st series, and T. 1–53 of 2d series. By G. A. Matile.

	Subject-matter.	Names.
v. 1.	A—Bosoms.	A—Bonnell.
2.	Bosa—Clover.	Bonnes—Chinard.
3.	Clyster—D.	Chinnock—Dopter.
4.	E—Gates.	Dorchies—Gavioli.
5.	Gauge—I.	Gavoty—I.
6.	J—Mincing.	J—Leterme.
7.	Mines—Planos.	Letessier—M.
8.	Picking—R.	N—P.
9.	S—Starch.	Q—Sommerville.
10.	Stations—Toupees.	Sonis—Z.
11.	Tournure—Z.	

GREAT BRITAIN. Commissioners of patents journal, 1854–1876; containing lists of patents issued at the Great seal patent office, semi-weekly.

—— Specifications of letters patent for inventions. Text, Nos. 1–14,359; plates, Nos. 169–14,359. Text, v. 1–408, imp. 8°. Plates, v. 3, 4, 6–408, fol. [Text and plates bound separately, and plates mounted on muslin. No plates to v. 1, 2, and 5.]

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

[*Old law series.*]

Vol.	Specifications.	Years
1	1– 80	1617–1635
2	81– 160	1635– 70
3	161– 240	1670– 84
4	241– 320	1684– 93
5	321– 400	1693–1715
6	401– 480	1715– 25
7	481– 560	1725– 37
8	561– 640	1737– 49
9	641– 720	1749– 50
10	721– 800	1750– 63
11	801– 880	1763– 67
12	881– 960	1767– 70
13	961–1040	1770– 73
14	1041–1120	1773– 76
15	1121–1200	1776– 78
16	1201–1280	1778– 81
17	1281–1360	1781– 83
18	1361–1440	1783– 84
19	1441–1520	1784– 86
20	1521–1600	1786– 87
21	1601–1680	1787– 89
22	1681–1760	1789– 90
23	1761–1841	1790– 91
24	1842–1919	1791– 92
25	1920–2000	1792– 94
26	2001–2072	1794– 95
27	2073–2135	1795– 96
28	2136–2182	1796– 97
29	2183–2243	1797– 98
30	2244–2324	1798– 99
31	2325–2406	1799–1800
32	2407–2502	1800– 01
33	2503–2570	1801– 02
34	2571–2638	1802
35	2639–2738	1802–1803
36	2739–2800	1803– 04
37	2801–2867	1804– 05
38	2868–2968	1805– 06
39	2969–3040	1806– 07
40	3041–3114	1807– 08
41	3115–3162	1808
42	3163–3237	1808–1809
43	3238–3301	1809– 10
44	3302–3376	1810
45	3377–3448	1810–1811
46	3449–3524	1811– 12
47	3525–3589	1812
48	3590–3669	1812–1813
49	3670–3751	1813
50	3752–3818	1813–1814
51	3819–3882	1814– 15
52	3883–3980	1815– 16
53	3981–4037	1816
54	4038–4113	1816–1817
55	4114–4173	1817
56	4174–4229	1817–1818
57	4230–4275	1818
58	4276–4345	1818–1819
59	4346–4402	1819
0	4403–4469	1819–1820
61	4470–4522	1820

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Year.
62	4523–4599	1820–1821
63	4600–4654	1821– 22
64	4655–4706	1822
65	4707–4756	1822–1823
66	4757–4811	1823
67	4812–4862	1823
68	4863–4919	1823–1824
69	4920–4966	1824
70	4967–5016	1824
71	5017–5074	1824–1825
72	5075–5125	1825
73	5126–5186	1825
74	5187–5232	1825
75	5233–5282	1825
76	5283–5324	1825–1826
77	5325–5400	1826
78	5401–5450	1826–1827
79	5451–5489	1827
80	5490–5546	1827
81	5547–5591	1827
82	5592–5641	1827
83	5642–5699	1828
84	5700–5750	1828–1829
85	5751–5789	1829
86	5790–5830	1829
87	5831–5879	1829–1830
88	5880–5934	1830
89	5935–5971	1830
90	5972–6026	1830
91	6027–6061	1830–1831
92	6062–6107	1831
93	6108–6149	1831
94	6150–6190	1831
95	6191–6220	1831–1832
96	6221–6240	1832
97	6241–6287	1832
98	6288–6321	1832
99	6322–6357	1832–1833
100	6358–6387	1833
101	6388–6414	1833
102	6415–6444	1833
103	6445–6484	1833
104	6485–6512	1833
105	6513–6543	1833–1834
106	6544–6567	1834
107	6568–6598	1834
108	6599–6620	1834
109	6621–6640	1834
110	6641–6674	1834
111	6675–6712	1834
112	6713–6741	1834
113	6742–6763	1834–1835
114	6764–6790	1835
115	6791–6806	1835
116	6807–6840	1835
117	6841–6850	1835
118	6851–6854	1835
119	6855–6891	1835
120	6892–6916	1835
121	6917–6935	1835
122	6936–6950	1835
123	6951–6990	1835–1836

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Year.
124	6991–7031	1836
125	7032–7037	1836
126	7038–7064	1836
127	7065–7105	1836
128	7106–7135	1836
129	7136–7172	1836
130	7173–7190	1836
131	7191–7219	1836
132	7220–7252	1836
133	7253–7290	1836–1837
134	7291–7323	1837
135	7324–7347	1837
136	7348–7372	1837
137	7373–7399	1837
138	7400–7429	1837
139	7430–7455	1837
140	7456–7472	1837
141	7473–7490	1837
142	7491–7519	1837
143	7520–7553	1837–1838
144	7554–7583	1838
145	7584–7600	1838
146	7601–7637	1838
147	7638–7668	1838
148	7669–7694	1838
149	7695–7738	1838
150	7739–7777	1838
151	7778–7815	1838
152	7816–7841	1838
153	7842–7871	1838
154	7872–7920	1838–1839
155	7921–7980	1839
156	7981–8033	1839
157	8034–8071	1839
158	8072–8108	1839
159	8109–8142	1839
160	8143–8195	1839
161	8196–8220	1839
162	8221–8259	1839
163	8260–8287	1839
164	8288–8316	1839
165	8317–8352	1839–1840
166	8353–8379	1840
167	8380–8405	1840
168	8406–8430	1840
169	8431–8473	1840
170	8474–8505	1840
171	8506–8531	1840
172	8532–8551	1840
173	8552–8594	1840
174	8595–8623	1840
175	8624–8644	1840
176	8645–8660	1840
177	8661–8689	1840
178	8690–8700	1840
179	8701–8727	1840
180	8728–8759	1840
181	8760–8789	1840–1841
182	8790–8817	1841
183	8818–8839	1841
184	8840–8882	1841
185	8883–8918	1841
186	8919–8947	1841

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Year.
187	8948– 8963	1841
188	8964– 8981	1841
189	8982– 9006	1841
190	9007– 9032	1841
191	9033– 9061	1841
192	9062– 9084	1841
193	9085– 9121	1841
194	9122– 9155	1841
195	9156– 9189	1841
196	9190– 9231	1841–1842
197	9232– 9261	1842
198	9262– 9287	1842
199	9288– 9321	1842
200	9322– 9355	1842
201	9356– 9380	1842
202	9381– 9412	1842
203	9413– 9437	1842
204	9438– 9463	1842
205	9464– 9473	1842
206	9474– 9506	1842
207	9507– 9538	1842
208	9539– 9557	1842
209	9558– 9582	1842–1843
210	9583– 9607	1843
211	9608– 9639	1843
212	9640– 9665	1843
213	9666– 9694	1843
214	9695– 9713	1843
215	9714– 9742	1843
216	9743– 9778	1843
217	9779– 9798	1843
218	9799– 9828	1843
219	9829– 9850	1843
220	9851– 9879	1843
221	9880– 9903	1843
222	9904– 9918	1843
223	9919– 9958	1843
224	9959– 9989	1843
225	9990–10023	1843–1844
226	10024–10058	1844
227	10059–10091	1844
228	10092–10125	1844
229	10126–10150	1844
230	10151–10164	1844
231	10165–10182	1844
232	10183–10212	1844
233	10213–10238	1844
234	10239–10263	1844
235	10264–10299	1844
236	10300–10325	1844
237	10326–10349	1844
238	10350–10369	1844
239	10370–10387	1844
240	10388–10411	1844
241	10412–10427	1844
242	10428–10446	1844
243	10447–10449	1844
244	10450–10477	1844–1845
245	10478–10508	1845
246	10509–10531	1845
247	10532–10556	1845
248	10557–10584	1845
249	10585–10611	1845

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Year.
250	10612–10654	1845
251	10655–10682	1845
252	10683–10713	1845
253	10714–10729	1845
254	10730–10746	1845
255	10747–10779	1845
256	10780–10802	1845
257	10803–10825	1845
258	10826–10845	1845
259	10846–10883	1845
260	10884–10905	1845
261	10906–10933	1845
262	10934–10974	1845
263	10975–11011	1845
264	11012–11025	1845–1846
265	11026–11042	1846
266	11043–11070	1846
267	11071–11096	1846
268	11097–11114	1846
269	11115–11129	1846
270	11130–11155	1846
271	11156–11195	1846
272	11196–11209	1846
273	11210–11234	1846
274	11235–11260	1846
275	11261–11286	1846
276	11287–11318	1846
277	11319–11344	1846
278	11345–11378	1846
279	11379–11400	1846
280	11401–11437	1846
281	11438–11458	1846
282	11459–11472	1846
283	11473–11486	1846
284	11487–11499	1846
285	11500–11522	1846–1847
286	11523–11557	1847
287	11558–11588	1847
288	11589–11614	1847
289	11615–11627	1847
290	11628–11648	1847
291	11649–11672	1847
292	11673–11697	1847
293	11698–11721	1847
294	11722–11745	1847
295	11746–11765	1847
296	11766–11793	1847
297	11794–11819	1847
298	11820–11851	1847
299	11852–11885	1847
300	11886–11899	1847
301	11900–11918	1847
302	11919–11946	1847
303	11947–11967	1847
304	11968–11989	1847
305	11990–12025	1847–1848
306	12026–12043	1848
307	12044–12069	1848
308	12070–12086	1848
309	12087–12104	1848
310	12105–12122	1848
311	12123–12146	1848
312	12147–12169	1848

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Year.
313	12170–12186	1848
314	12187–12201	1848
315	12202–12220	1848
316	12221–12232	1848
317	12233–12259	1848
318	12260–12281	1848
319	12282–12303	1848
320	12304–12328	1848
321	12329–12352	1848
322	12353–12374	1848
323	12375–12396	1848–1849
324	12397–12421	1849
325	12422–12439	1849
326	12440–12462	1849
327	12463–12482	1849
328	12483–12507	1849
329	12508–12524	1849
330	12525–12541	1849
331	12542–12567	1849
332	12568–12598	1849
333	12599–12615	1849
334	12616–12645	1849
335	12646–12661	1849
336	12662–12683	1849
337	12684–12713	1849
338	12714–12730	1849
339	12731–12747	1849
340	12748–12768	1849
341	12769–12791	1849
342	12792–12815	1849
343	12816–12836	1849
344	12837–12853	1849
345	12854–12873	1849
346	12874–12895	1849
347	12896–12904	1849
348	12905–12933	1849
349	12934–12951	1849–1850
350	12952–12967	1850
351	12968–12994	1850
352	12995–13013	1850
353	13014–13031	1850
354	13032–13056	1850
355	13057–13070	1850
356	13071–13101	1850
357	13102–13134	1850
358	13135–13153	1850
359	13154–13173	1850
360	13174–13205	1850
361	13206–13234	1850
362	13235–13253	1850
363	13254–13267	1850
364	13268–13289	1850
365	13290–13317	1850
366	13318–13331	1850
367	13332–13362	1850
368	13363–13398	1850
369	13399–13415	1850
370	13416–13443	1850–1851
371	13444–13461	1851
372	13462–13479	1851
373	13480–13510	1851
374	13511–13533	1851
375	13534–13554	1851

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Year
376	13555–13576	1851
377	13577–13598	1851
378	13599–13627	1851
379	13628–13637	1851
380	13638–13652	1851
381	13653–13686	1851
382	13687–13704	1851
383	13705–13727	1851
384	13728–13736	1851
385	13737–13757	1851
386	13758–13781	1851
387	13782–13795	1851
388	13796–13819	1851
389	13820–13843	1851
390	13844–13869	1851
391	13870–13879	1851
392	13880–13885	1851
393	13886–13890	1851–1852
394	13891–13916	1852
395	13917–13935	1852
396	13936–13985	1852
397	13986–14034	1852
398	14035–14074	1852
399	14075–14105	1852
400	14106–14136	1852
401	14137–14165	1852
402	14166–14186	1852
403	14186–14203	1852
404	14204–14239	1852
405	14240–14265	1852
406	14266–14287	1852
407	14288–14319	1852
408	14320–14359	1852

[*New law series.*]

1852.

Vol.	Specifications.	Vol.	Specifications.
1	1– 71	10	575– 641
2	72– 130	11	642– 717
3	131– 204	12	718– 780
4	205– 244	13	781– 851
5	245– 294	14	852– 938
6	295– 347	15	939–1022
7	348– 428	16	1023–1115
8	429– 488	17	1116–1277
9	489– 574		

1853.

1	1– 72	18	1272–1352
2	73– 146	19	1353–1414
3	147– 225	20	1415–1464
4	226– 298	21	1465–1566
5	299– 403	22	1567–1620
6	404– 471	23	1621–1707
7	472– 559	24	1708–1778
8	560– 624	25	1779–1871
9	625– 698	26	1872–1937
10	699– 764	27	1938–1988
11	765– 838	28	1989–2054
12	839– 899	29	2055–2141
13	900– 978	30	2142–2206
14	979–1048	31	2207–2269
15	1049–1127	32	2270–2341
16	1128–1190	33	2342–2411
17	1191–1271	34	2412–2472

PATENTS.

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Vol.	Specifications.
35	2473–2548	39	2775–2840
36	2549–2618	40	2841–2914
37	2619–2713	41	2915–2991
38	2714–2774	42	2992–3045

1854.

1	1– 107	19	1426–1483
2	108– 197	20	1484–1558
3	198– 264	21	1559–1663
4	265– 327	22	1664–1744
5	328– 402	23	1745–1835
6	403– 494	24	1836–1910
7	495– 570	25	1911–2000
8	571– 655	26	2001–2071
9	656– 714	27	2072–2123
10	715– 798	28	2124–2216
11	799– 869	29	2217–2278
12	870– 957	30	2279–2345
13	958–1030	31	2346–2440
14	1031–1109	32	2441–2504
15	1110–1195	33	2505–2600
16	1196–1276	34	2601–2676
17	1277–1358	35	2677–2764
18	1359–1425		

1855.

1	1– 84	20	1589–1655
2	85– 201	21	1656–1763
3	202– 290	22	1764–1861
4	291– 357	23	1862–1941
5	358– 430	24	1942–2009
6	431– 521	25	2010–2077
7	522– 624	26	2078–2164
8	625– 691	27	2165–2245
9	692– 753	28	2246–2328
10	753– 854	29	2329–2397
11	855– 936	30	2398–2482
12	937–1035	31	2483–2529
13	1036–1106	32	2530–2622
14	1107–1190	33	2623–2697
15	1191–1270	34	2698–2785
16	1271–1340	35	2786–2859
17	1341–1430	36	2860–2917
18	1431–1500	37	2918–2958
19	1501–1588		

1856.

1	1– 69	20	1546–1626
2	70– 120	21	1627–1694
3	121– 208	22	1695–1787
4	209– 301	23	1788–1880
5	302– 374	24	1881–1967
6	375– 467	25	1968–2063
7	468– 342	26	2064–2151
8	343– 630	27	2152–2235
9	631– 703	28	2236–2327
10	704– 788	29	2328–2407
11	759– 885	30	2408–2478
12	886– 982	31	2479–2578
13	983–1061	32	2579–2622
14	1062–1142	33	2623–2773
15	1143–1218	34	2774–2858
16	1219–1291	35	2859–2952
17	1292–1384	36	2953–3036
18	1385–1448	37	3037–3106
19	1449–1545		

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

1857.

Vol.	Specifications.	Vol.	Specifications.
1	1– 128	19	1631–1681
2	129– 235	20	1682–1788
3	236– 312	21	1789–1874
4	313– 400	22	1875–1966
5	401– 480	23	1967–2053
6	481– 552	24	2054–2150
7	553– 613	25	2151–2240
8	614– 710	26	2241–2330
9	711– 794	27	2331–2387
10	795– 910	28	2388–2473
11	911–1003	29	2474–2554
12	1004–1080	30	2555–2630
13	1081–1161	31	2631–2720
14	1162–1271	32	2721–2818
15	1272–1362	33	2819–2907
16	1363–1437	34	2908–3002
17	1438–1534	35	3003–3115
18	1535–1630	36	3116–3200

1858.

1	1– 62	20	1451–1509
2	63– 121	21	1510–1567
3	122– 174	22	1568–1675
4	175– 255	23	1676–1756
5	256– 349	24	1757–1836
6	350– 463	25	1837–1918
7	464– 547	26	1919–2001
8	548– 632	27	2002–2085
9	633– 705	28	2086–2170
10	706– 759	29	2171–2253
11	760– 841	30	2254–2338
12	842– 916	31	2339–2412
13	917– 978	32	2413–2507
14	979–1058	33	2508–2590
15	1059–1118	34	2591–2680
16	1119–1204	35	2681–2764
17	1205–1275	36	2765–2860
18	1276–1353	37	2861–2917
19	1354–1450	38	2918–3007

1859.

1	1– 104	19	1563–1647
2	105– 170	20	1648–1723
3	171– 265	21	1724–1776
4	266– 366	22	1777–1886
5	367– 438	23	1887–1944
6	439– 512	24	1945–2015
7	513– 603	25	2016–2083
8	604– 702	26	2084–2159
9	703– 772	27	2160–2233
10	773– 875	28	2234–2322
11	876– 971	29	2323–2373
12	972–1065	30	2374–2466
13	1066–1153	31	2467–2533
14	1154–1229	32	2534–2623
15	1230–1316	33	2624–2714
16	1317–1395	34	2715–2829
17	1396–1495	35	2830–2904
18	1496–1562	36	2905–3000

1860.

1	1– 91	3	201– 222
2	92– 200	4	223– 301

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Vol.	Specifications.
5	302– 406	22	1712–1792
6	407– 504	23	1793–1892
7	505– 585	24	1893–1966
8	586– 672	25	1967–2070
9	673– 733	26	2071–2154
10	734– 804	27	2155–2237
11	805– 870	28	2238–2306
12	871– 952	29	2307–2410
13	953–1033	30	2411–2504
14	1034–1114	31	2505–2593
15	1115–1217	32	2594–2684
16	1218–1270	33	2685–2786
17	1271–1356	34	2787–2857
18	1357–1434	35	2858–2941
19	1435–1520	36	2942–3022
20	1521–1601	37	3023–3128
21	1602–1711	38	3129–3196

1861.

1	1– 111	21	1740–1817
2	112– 205	22	1818–1901
3	206– 288	23	1902–1943
4	289– 394	24	1944–2026
5	395– 505	25	2027–2121
6	506– 596	26	2122–2231
7	597– 715	27	2232–2285
8	716– 785	28	2286–2362
9	786– 824	29	2363–2422
10	825– 891	30	2423–2511
11	892– 981	31	2512–2569
12	982–1063	32	2570–2662
13	1064–1133	33	2663–2752
14	1134–1220	34	2753–2821
15	1221–1295	35	2822–2898
16	1296–1373	36	2899–2990
17	1374–1457	37	2991–3090
18	1458–1530	38	3091–3193
19	1531–1624	39	3194–3276
20	1625–1739		

1862.

1	1– 70	22	1624–1690
2	71– 164	23	1691–1767
3	165– 253	24	1768–1857
4	254– 357	25	1858–1942
5	358– 449	26	1943–2023
6	450– 552	27	2024–2104
7	553– 603	28	2105–2171
8	604– 711	29	2172–2280
9	712– 750	30	2281–2374
10	751– 777	31	2375–2448
11	778– 874	32	2449–2531
12	875– 948	33	2532–2637
13	949–1048	34	2638–2713
14	1049–1134	35	2714–2802
*15	[Error in numbering.]	36	2803–2876
		37	2877–2952
16	1135–1220	38	2953–3034
17	1221–1296	39	3035–3115
18	1297–1368	40	3116–3206
19	1369–1447	41	3207–3313
20	1448–1538	42	3314–3397
21	1539–1623	43	3398–3490

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.
1863.	
1	1– 87
2	88– 192
3	193– 264
4	265– 367
5	368– 490
6	491– 592
7	593– 653
8	654– 736
9	737– 825
10	826– 903
11	904– 991
12	992–1068
13	1069–1136
14	1137–1215
15	1216–1250
16	1251–1331
17	1332–1441
18	1442–1510
19	1511–1581
20	1582–1630
21	1631–1711
1864.	
1	1– 87
2	88– 136
3	137– 203
4	204– 282
5	283– 368
6	369– 452
7	453– 544
8	545– 622
9	623– 694
10	695– 790
11	791– 850
12	851– 944
13	945–1032
14	1033–1126
15	1127–1205
16	1206–1267
17	1268–1346
18	1347–1425
19	1426–1494
20	1495–1584
1865.	
1	1– 100
2	101– 172
3	173– 264
4	265– 365
5	366– 431
6	432– 526
7	527– 608
8	609– 690
9	691– 778
10	779– 841
11	842– 924
12	925–1024
13	1025–1076
14	1077–1177
15	1178–1239
16	1240–1300
17	1301–1380
18	1381–1468
19	1469–1562
20	1563–1646
21	1647–1746
22	1712–1790
23	1791–1873
24	1874–1957
25	1958–2043
26	2044–2103
27	2104–2166
28	2167–2250
29	2251–2329
30	2330–2446
31	2447–2561
32	2562–2647
33	2648–2696
34	2697–2768
35	2769–2837
36	2838–2926
37	2927–3005
38	3006–3083
39	3084–3167
40	3168–3232
41	3233–3309
21	1585–1626
22	1627–1712
23	1713–1793
24	1794–1865
25	1866–1950
26	1951–2028
27	2029–2129
28	2130–2205
29	2206–2333
30	2334–2449
31	2450–2554
32	2555–2644
33	2645–2731
34	2732–2831
35	2832–2917
36	2918–3008
37	3009–3099
38	3100–3163
39	3164–3210
40	3211–3260
22	1747–1816
23	1817–1903
24	1904–1974
25	1975–2049
26	2050–2137
27	2138–2228
28	2229–2312
29	2313–2394
30	2395–2453
31	2454–2534
32	2535–2626
33	2627–2708
34	2709–2771
35	2772–2835
36	2836–2926
37	2927–2999
38	3000–3066
39	3067–3142
40	3143–3221
41	3222–3290
42	3291–3386

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.
1866.	
1	1– 104
2	105– 168
3	169– 249
4	250– 319
5	320– 417
6	418– 475
7	476– 577
8	578– 676
9	677– 784
10	785– 849
11	850– 947
12	948–1038
13	1039–1136
14	1137–1200
15	1201–1300
16	1301–1382
17	1383–1451
18	1452–1526
19	1527–1595
20	1596–1681
21	1682–1778
1867.	
1	1– 79
2	80– 177
3	178– 270
4	271– 353
5	354– 417
6	418– 495
7	496– 574
8	575– 653
9	654– 761
10	762– 841
11	842– 918
12	919–1009
13	1010–1075
14	1076–1138
15	1139–1247
16	1248–1328
17	1329–1391
18	1392–1456
19	1457–1532
20	1533–1620
21	1621–1728
22	1729–1804
23	1805–1898
1868.	
1	1– 89
2	90– 166
3	167– 238
4	239– 320
5	321– 360
6	361– 443
7	444– 536
8	537– 637
9	638– 722
10	723– 800
11	801– 888
12	889– 981
13	982–1068
14	1069–1153
15	1154–1200
16	1201–1274
17	1275–1370
18	1371–1469
19	1470–1548
20	1549–1628
21	1629–1692
22	1693–1771
23	1772–1894
24	1895–1982
25	1983–2053
26	2054–2119
27	2120–2183
28	2184–2263
29	2264–2363
30	2364–2429
31	2430–2505
32	2506–2599
33	2600–2667
34	2668–2752
35	2753–2860
36	2861–2927

Digitized by Google

ATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Vol	Specifications.
37	2928-2997	44	3471-3554
38	2998-3093	45	3555-3648
39	3094-3146	46	3649-3712
40	3147-3233	47	3713-3797
41	3234-3315	48	3798-3856
42	3316-3389	49	3857-3914
43	3390-3470	50	3915-3991
	1869.		
1	1- 99	24	1921-2018
2	100- 173	25	2019-2102
3	174- 261	26	2103-2206
4	262- 361	27	2207-2304
5	362- 468	28	2305-2416
6	469- 558	29	2417-2482
7	559- 628	30	2483-2539
8	629- 727	31	2540-2620
9	728- 805	32	2621-2699
10	806- 889	33	2700-2792
11	890- 943	34	2793-2906
12	944-1003	35	2907-2955
13	1004-1096	36	2956-3055
14	1097-1208	37	3056-3114
15	1209-1312	38	3115-3211
16	1313-1364	39	3212-3269
17	1365-1430	40	3270-3339
18	1431-1494	41	3340-3399
19	1495-1585	42	3400-3473
20	1586-1676	43	3474-3561
21	1677-1752	44	3562-3628
22	1753-1840	45	3629-3706
23	1841-1920	46	3707-3786
	1870.		
1	1- 64	24	1814-1895
2	65- 160	25	1896-1988
3	161- 242	26	1989-2050
4	243- 315	27	2051-2138
5	316- 400	28	2139-2229
6	401- 482	29	2230-2306
7	483- 556	30	2307-2352
8	557- 596	31	2353-2407
9	597- 669	32	2408-2173
10	670- 737	33	2474-2559
11	738- 809	34	2560-2623
12	810- 917	35	2624-2690
13	918- 977	36	2691-2763
14	978-1069	37	2764-2836
15	1070-1161	38	2837-2903
16	1162-1251	39	2904-3015
17	1252-1324	40	3016-3067
18	1325-1421	41	3068-3144
19	1422-1513	42	3145-3215
20	1514-1594	43	3216-3292
21	1595-1665	44	3293-3349
22	1666-1741	45	3350-3405
23	1742-1813		
	1871.		
1	1- 69	8	510- 576
2	70- 148	9	577- 644
3	149- 228	10	645- 699
4	229- 305	11	700- 779
5	306- 374	12	780- 867
6	375- 435	13	868- 938
7	436- 509	14	939-1013

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Vol.	Specifications.
15	1014-1085	30	2225-2315
16	1086-1171	31	2316-2406
17	1172-1259	32	2407-2496
18	1260-1327	33	2497-2580
19	1328-1417	34	2581-2656
20	1418-1490	35	2657-2740
21	1491-1564	36	2741-2820
22	1565-1646	37	2821-2903
23	1647-1716	38	2904-3002
24	1717-1797	39	3003-3077
25	1798-1866	40	3078-3172
26	1867-1952	41	3173-3257
27	1953-2048	42	3258-3339
28	2049-2130	43	3340-3437
29	2131-2224	44	3438-3529
	1872.		
1	1- 89	27	2096-2165
2	90- 173	28	2166-2254
3	174- 270	29	2255-2335
4	271- 356	30	2336-2411
5	357- 418	31	2412-2487
6	419- 490	32	2488-2563
7	491- 580	33	2564-2619
8	581- 668	34	2620-2679
9	669- 755	35	2680-2753
10	756- 828	36	2754-2837
11	829- 910	37	2838-2918
12	911- 974	38	2919-2993
13	975-1068	39	2994-3057
14	1069-1152	40	3058-3141
15	1153-1226	41	3142-3237
16	1227-1345	42	3238-3298
17	1346-1434	43	3299-3360
18	1435-1519	44	3361-3439
19	1520-1598	45	3440-3540
20	1599-1659	46	3541-3605
21	1660-1736	47	3606-3685
22	1737-1817	48	3686-3760
23	1818-1904	49	3761-3819
24	1905-1961	50	3820-3884
25	1962-2030	51	3885-3970
26	2031-2095		
	1873.		
1	1- 90	21	1623-1693
2	91- 166	22	1694-1757
3	167- 251	23	1758-1824
4	252- 336	24	1825-1899
5	337- 402	25	1900-1977
6	403- 489	26	1978-2052
7	490- 574	27	2053-2140
8	575- 664	28	2141-2225
9	665- 749	29	2226-2289
10	750- 851	30	2290-2394
11	852- 936	31	2395-2463
12	937-1004	32	2464-2540
13	1005-1086	33	2541-2624
14	1087-1158	34	2625-2703
15	1159-1245	35	2704-2786
16	1246-1307	36	2787-2883
17	1308-1386	37	2884-2969
18	1387-1438	38	2970-3068
19	1439-1552	39	3069-3148
20	1553-1622	40	3149-3239

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Vol.	Specifications.
41	3240–3336	48	3819–3901
42	3337–3405	49	3902–3987
43	3406–3481	50	3988–4075
44	3482–3550	51	4076–4132
45	3551–3640	52	4133–4228
46	3641–3722	53	4229–4294
47	3723–3818		

1874.

1	1– 66	30	2321–2376
2	67– 134	31	2377–2447
3	135– 196	32	2448–2547
4	197– 273	33	2548–2645
5	274– 353	34	2646–2728
6	354– 427	35	2729–2801
7	428– 492	36	2802–2888
8	493– 597	37	2889–2950
9	598– 659	38	2951–3018
10	660– 727	39	3019–3090
11	728– 797	40	3091–3146
12	798– 869	41	3147–3240
13	870– 936	42	3241–3305
14	937–1004	43	3306–3397
15	1005–1097	44	3398–3476
16	1098–1180	45	3477–3535
17	1181–1253	46	3536–3655
18	1254–1338	47	3656–3733
19	1339–1445	48	3734–3797
20	1446–1539	49	3798–3852
21	1540–1619	50	3853–3943
22	1620–1726	51	3944–4034
23	1727–1815	52	4035–4106
24	1816–1893	53	4107–4176
25	1894–1950	54	4177–4257
26	1951–2050	55	4258–4326
27	2051–2137	56	4327–4404
28	2138–2232	57	4405–4425
29	2233–2320	58	4426–4492

1875.

1	1– 86	25	1899–1984
2	87– 162	26	1985–2076
3	163– 240	27	2077–2163
4	241– 316	28	2164–2241
5	317– 391	29	2242–2340
6	392– 479	30	2341–2433
7	480– 581	31	2434–2502
8	582– 660	32	2503–2586
9	661– 727	33	2587–2655
10	728– 790	34	2656–2732
11	791– 853	35	2733–2799
12	854– 934	36	2800–2879
13	935–1008	37	2880–2973
14	1009–1089	38	2974–3055
15	1090–1179	39	3056–3125
16	1180–1272	40	3126–3208
17	1273–1350	41	3209–3308
18	1351–1436	42	3309–3396
19	1437–1518	43	3397–3462
20	1519–1599	44	3463–3535
21	1600–1681	45	3536–3597
22	1682–1735	46	3598–3631
23	1736–1819	47	3632–3716
24	1820–1898	48	3717–3793

PATENTS—Continued.

GREAT BRITAIN.

Vol.	Specifications.	Vol.	Specifications.
49	3794–3871	54	4213–4287
50	3872–3964	55	4288–4390
51	3965–4036	56	4391–4475
52	4037–4136	57	4476–4561
53	4137–4212		

[*New series.*]

1876.

1	1– 100	27	2601–2700
2	101– 200	28	2701–2800
3	201– 300	29	2801–2900
4	301– 400	30	2901–3000
5	401– 500	31	3001–3100
6	501– 600	32	3101–3200
7	601– 700	33	3201–3300
8	701– 800	34	3301–3400
9	801– 900	35	3401–3500
10	901–1000	36	3501–3600
11	1001–1100	37	3601–3700
12	1101–1200	38	3701–3800
13	1201–1300	39	3801–3900
14	1301–1400	40	3901–4000
15	1401–1500	41	4001–4100
16	1501–1600	42	4101–4200
17	1601–1700	43	4201–4300
18	1701–1800	44	4301–4400
19	1801–1900	45	4401–4500
20	1901–2000	46	4501–4600
21	2001–2100	47	4601–4700
22	2101–2200	48	4701–4800
23	2201–2300	49	4801–4900
24	2301–2400	50	4901–5000
25	2401–2500	51	5001–5069
26	2501–2600		

1877.

1	1– 100	5	401– 500
2	101– 200	6	501– 600
3	201– 300	7	601– 700
4	301– 400	8	701– 800

—— Specifications for letters patent for inventions: Abridgments of, from the earliest enrolled to 1866. In classes and chronologically arranged.

List of abridgments.

1. Drains and sewers; including the manufacture of drain tiles and pipes.
2. Sewing and embroidering. 2d ed.
3. Manure.
4. Preservation of food. Part I, 1691–1855. Part II, 1856–1866.
5. Marine propulsion. Parts I, II, and III, 1618–1857. Part IV, 1857–1866.
6. Manufacture of iron and steel. Parts I, II, and III, 1621–1857. Part IV, 1857–1865.
7. Aids to locomotion.
8. Steam culture.
9. Watches, clocks, and other time-keepers. Part I, 1661–1856. Part II, 1857–1866.
10. Fire-arms and other weapons, ammunition, and accoutrements. Part I, 1588–1858. Part II, 1858–1866.
11. Paper, manufacture of paper, pasteboard, and papier mâché. Part I, 1665–1857. Part II, 1858–1866.

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

12. Paper cutting, folding, and ornamenting, including envelopes, cards, paper-hangings, etc.
13. Typographic, lithographic, and plate printing. Part I, 1617-1857. Part II, 1858-1861.
14. Bleaching, dyeing, and printing yarns and fabrics. Part I, 1617-1857. Part II, 1858-1866.
15. Electricity and magnetism, their generation and applications. Part I, 1766-1857. Part II, 1858-1866. 2d ed.
16. Preparation of India rubber and gutta percha. 2d ed.
17. Production and applications of gas. Part I, 1681-1858. Part II, 1859-1866. 2d ed.
18. Metals and alloys.
19. Photography. Part I, 1839-1859. Part II, 1860-1866. 2d ed.
20. Weaving. Part I, 1620-1859. Part II, 1860-1866.
21. Ship building, repairing, sheathing, launching, etc. Part I, 1618-1860. Part II, 1861-1866.
22. Bricks and tiles. Part I, 1619-1860. Part II, 1861-1866.
23. Plating or coating metals with metals. Part I, 1637-1860. Part II, 1861-1866. 2d ed.
24. Pottery. Part I, 1626-1861. Part II, 1862-1866.
25. Medicine, surgery, and dentistry, 1620-1866. 2d ed.
26. Music and musical instruments. 2d ed.
27. Oils, fats, lubricants, candles, and soaps. 2d ed.
28. Spinning; including the preparation of fibrous materials, and the doubling of yarns and threads. Part I, 1624-1863. Part II, 1864-1866.
29. Lace and other looped and netted fabrics.
30. Preparation and combustion of fuel.
31. Raising, lowering, and weighing. 2d ed.
32. Hydraulics. 2d ed.
33. Railways. 2d ed.
34. Saddlery, harness, stable fittings, etc.
35. Roads and ways.
36. Bridges, viaducts, and aqueducts.
37. Writing instruments and materials.
38. Railway signals and communicating apparatus.
39. Furniture and upholstery.
40. Acids, alkalies, oxides, and salts.
41. Aëronautics.
42. Preparation and use of tobacco.
43. Books, portfolios, card-cases, etc.
44. Lamps, candlesticks, chandeliers, and other illuminating apparatus.
45. Needles and pins.
46. Carriages and other vehicles for railways.
47. Umbrellas, parasols, and walking sticks.
48. Sugar.
49. Steam engine. Part I (in two volumes), 1618-1859. Part II (in two volumes), 1860-1866.
50. Paints, colours, and varnishes. 1618-1866.
51. Toys, games, and exercises.

PATENTS—Continued.

GREAT BRITAIN.

52. Ventilation.
53. Farriery, including the medical and surgical treatment of animals.
54. Artists' instruments and materials. 1618-1866.
55. Skins, hides, and leather.
56. Preparing and cutting cork, bottling liquids, securing and opening bottles, etc.
57. Brushing and sweeping.
58. Nails, rivets, bolts, screws, nuts, and washers.
59. Hinges, hinge-joints, and door-springs.
60. Locks, latches, bolts, and similar fastenings.
61. Cooking, bread-making, and the preparation of confectionery.
62. Air, gas, and other motive-power engines.
63. Water closets, earth closets, urinals, etc.
64. Safes, strong rooms, tills, and similar depositories.
65. Wearing apparel. Division I. Head coverings.
66. Wearing apparel. Division II. Body coverings.
67. Wearing apparel. Division III. Foot coverings.
68. Wearing apparel. Division IV. Dress fastenings.
69. Anchors.
70. Metallic pipes and tubes.
71. Mining, quarrying, tunnelling, and well-sinking. 1618-1866.
72. Milking, churning, and cheese-making.
73. Masts, sails, rigging, etc.; including apparatus for raising and lowering ships' boats.
74. Casks and barrels.
75. Steering and manœuvring vessels.
76. Optical, mathematical, and other philosophical instruments; including nautical, astronomical, and meteorological instruments.
77. Harbours, docks, canals, etc.
78. Grinding grain, and dressing flour and meal.
79. Purifying and filtering water.
80. Artificial leather, floorcloth, oilcloth, oilskin, and other waterproof fabrics.
81. Agriculture. Division I. Field implements (including methods of tilling and irrigating land).
82. Agriculture. Division II. Barn and farmyard implements (including the cleansing, drying, and storing of grain).
83. Agriculture. Division III. Agricultural and traction engines.
84. Trunks, portmanteaus, boxes, and bags.
85. Ice-making machines, ice safes, and ice houses (including the use of freezing agents for preserving alimentary substances).
86. Unfermented beverages, aërated liquids mineral waters, etc.
87. Tea, coffee, chicory, chocolate, cocoa, etc.
88. Fire engines, extinguishers, escapes, alarms, etc., including fire proof dresses and fabrics.

Alphabetical index to the list of abridgments.

Accoutrements. *See* Fire-arms, etc., 10.
Acids, etc., 40.

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Aërated liquids. *See* Beverages, 86.
Aëronautics, 41.
Agriculture, 81.
Agriculture by steam. *See* Steam culture, 8.
Air engines, etc., 62.
Alarms. *See* Fire-engines, 88.
Alkalies. *See* Acids, etc., 40.
Alloys. *See* Metals, etc., 18.
Ammunition. *See* Fire-arms, 10.
Anchors, 69.
Animals. *See* Farriery, etc., 53.
Aqueducts. *See* Bridges, etc., 36.
Artists' instruments, etc., 54.
Bags. *See* Trunks, etc., 84.
Barrels. *See* Casks, etc., 74.
Beverages, unfermented, 86.
Bleaching, etc., 14.
Boats, raising and lowering. *See* Masts, etc., 73.
Bolts. *See* Locks, etc., 60.
Bolts. *See* Nails, etc., 58.
Books, etc., 43.
Bottles. *See* Cork, etc., 56.
Bottling liquids. *See* Cork, etc., 56.
Boxes. *See* Trunks, etc., 84.
Braiding. *See* Lace, etc., 29.
Bread-making. *See* Cooking, etc., 61.
Bricks and tiles, 22.
Bridges, etc., 36.
Brushing, etc., 57.
Canals. *See* Harbours, etc., 77.
Candles. *See* Oils, etc., 27.
Candlesticks. *See* Lamps, 44.
Card-cases. *See* Books, etc., 43
Carriages for railways, 46.
Casks and barrels, 74.
Chandeliers. *See* Lamps, etc., 44.
Chenille. *See* Lace, etc., 29.
Cheese-making. *See* Milking, etc., 72.
Chicory. *See* Tea, etc., 87.
Chocolate. *See* Tea, etc., 87.
Churning. *See* Milking, etc., 72.
Clocks. *See* Watches, etc., 9.
Cocoa. *See* Tea, etc., 87.
Coffee. *See* Tea, etc., 87.
Colours. *See* Paints, etc., 50.
Confectionery. *See* Cooking, etc., 61.
Cooking, etc., 61.
Cork, etc., 56.
Dentistry. *See* Medicine, 25.
Docks. *See* Harbours, etc., 77.
Door-springs. *See* Hinges, etc., 59.
Drain tiles and pipes. *See* Drains, etc., 1.
Drains and sewers, 1.
Dressing flour and meal. *See* Grinding grain, etc., 79.
Dyeing. *See* Bleaching, 14.
Earth closets. *See* Water-closets, etc, 63.
Electricity, etc., 15.
Embroidery. *See* Sewing, 2.
Envelopes. *See* Paper, 12; *and* Writing instruments, etc., 37.
Escapes. *See* Fire-engines, 88.
Exercises. *See* Toys, etc., 51.

PATENTS—Continued.

GREAT BRITAIN.

Farriery, etc., 53.
Field implements. *See* Agriculture, 81.
Fire-arms, etc., 10.
Fire-engines, extinguishers, etc., 88.
Fire-proof depositories. *See* Safes, etc., 64.
Floorcloth. *See* Leather, artificial, etc., 80.
Food, preservation of, 4.
Freezing agents. *See* Ice-making machines, 85.
Fringe. *See* Lace, etc., 29.
Fuel, 30.
Furniture, etc., 39.
Games. *See* Toys, 51.
Gas, 17.
Gas engines. *See* Air engines, etc., 62.
Grinding grain, etc, 78.
Gutta-percha. *See* India-rubber, 16.
Harbours, etc., 77.
Harness. *See* Saddlery, 34.
Head coverings. *See* Wearing apparel, 65.
Hides. *See* Skins, etc., 55.
Hinges, etc., 59.
Hydraulics, 32.
Ice houses. *See* Ice-making machines, 85.
Ice-making machines, etc., 85.
Ice safes. *See* Ice-making machines, 85.
India-rubber, etc., 16.
Ink and inkstands. *See* Writing instruments, etc., 37.
Instruments, philosophical, 76.
Iron and steel, 6.
Lace, etc., 29.
Lamps, etc., 44.
Latches. *See* Locks, etc., 60.
Leather. *See* Skins, etc., 55.
Leather, artificial, etc., 80.
Liquids, aërated. *See* Beverages, 86.
Locks, etc., 60.
Locomotion, aids to, 7.
Lowering. *See* Raising, etc., 31.
Lubricants. *See* Oils, etc., 21.
Magnetism. *See* Electricity, 15.
Manure, 3.
Marine propulsion, 5.
Masts, etc., 73.
Mathematical instruments. *See* Instruments, etc., 16.
Medicine, etc., 25.
Metals and alloys, 18.
Metals, plating, etc., 23.
Milking, etc., 72.
Mineral waters. *See* Beverages, 86.
Mining, etc., 71.
Music, etc., 26.
Nails, etc., 58.
Needles and pins, 45.
Netting. *See* Lace, etc., 29.
Nuts. *See* Nails, etc., 58.
Oilcloth. *See* Leather, artificial, etc., 80.
Oils, etc., 27.
Oilskin. *See* Leather, artificial, etc., 80.
Optical instruments. *See* Instruments, etc., 76
Oxides. *See* Acids, etc., 40.
Paints, etc., 50.

Digitized by Google

PATENTS—Continued.

GREAT BRITAIN.

Paper, 11, 12.
Papier mâché. *See* Paper, 11, 12.
Parasols. *See* Umbrellas, 47.
Pasteboard. *See* Paper, 11, 12.
Peat. *See* Fuel, 30.
Pens. *See* Writing instruments, etc., 37.
Philosophical instruments, 76.
Photography, 19.
Pins. *See* Needles, etc., 45.
Pipes and tubes, metallic, 70.
Pipes, drain. *See* Drains, etc.
Plaiting. *See* Lace, etc., 29.
Plating and coating metals, etc., 23.
Portfolios. *See* Books, etc., 43.
Portmanteaus. *See* Trunks, etc., 84.
Pottery, 24.
Printing, typographic, etc., 13.
Printing yarns, etc., 14.
Propulsion, marine, 5.
Quarrying. *See* Mining, etc., 71.
Railway carriages, etc., 46.
Railway signals, etc., 38.
Railways, 33.
Raising, etc., 31.
Rigging. *See* Masts, etc., 73.
Rivets. *See* Nails, etc., 58.
Roads and ways, 35.
Saddlery, etc., 34.
Safes, etc., 64.
Sails. *See* Masts, etc., 73.
Salts. *See* Acids, etc., 40.
Screws. *See* Nails, etc., 58.
Sewers. *See* Drains, etc., 1.
Sewing and embroidering, 2.
Ship-building, etc., 21.
Signals. *See* Railways, 33.
Skins, etc., 55.
Spinning, etc., 28.
Soap. *See* Oils, etc., 27.
Stable fittings. *See* Saddlery, etc., 34.
Stationery. *See* Paper, 11, 12; *and* Writing instruments, etc., 37.
Steam culture, 8.
Steam-engines, 49.
Steel. *See* Iron, etc., 6.
Steering and manœuvring vessels, 75.
Strong rooms. *See* Safes, etc., 64.
Sugar, 48.
Surgery. *See* Medicine, 25.
Sweeping. *See* Brushing, etc., 57.
Tea, etc., 87.
Tiles. *See* Bricks, etc., 21; *and* Drains, etc., 1.
Tills. *See* Safes, etc., 64.
Tobacco, 42.
Toys, etc., 51.
Trunks, etc., 84.
Tunnelling. *See* Mining, etc., 71.
Umbrellas, etc., 47.
Upholstery. *See* Furniture, 39.
Urinals. *See* Water-closets, etc., 63.
Varnishes. *See* Paints, etc., 50.
Ventilation, 52.
Vessels, steering and manœuvring, 75.
Veterinary art. *See* Farriery.

PATENTS—Continued.

GREAT BRITAIN.

Viaducts. *See* Bridges, etc., 36.
Walking-sticks. *See* Umbrellas, 47.
Watches, etc., 9.
Water-closets, etc., 63.
Waterproof fabrics. *See* Leather, artificial, etc., 80.
Waters, mineral. *See* Beverages, 86.
Wearing apparel, 65.
Weaving, 20.
Weighing. *See* Raising, etc., 31.
Well-sinking. *See* Mining, etc., 71.
Writing instruments, etc., 37.
—— Specifications of letters patent for inventions.
Indexes. Alphabetical, 1617–1870. 19 v.
—— —— —— Chronological, 1617–1868. 18 v
—— —— —— Descriptive, 1867–1873. 9 v.
—— —— —— Reference, 1617–1852. 1 v.
—— —— —— Subject-matter, 1617–1870. 21 v.
—— *See, also,* GREAT BRITAIN. **Great** seal patent office.

ITALY. Bolletino industriale. 1a serie. Tomo 1–3, 1864–66. 2a serie, tomo 1, 1870.
[*1a serie.*]
Tomo 1, specifications Nos. 1–576, 1864.
Tomo 2, specifications Nos. 1–342, 1865.
Tomo 3, specifications Nos. 1–312, 1865.
[*2a serie.*]
Tomo 1, specifications Nos. 1–365, 1870. [Incomplete.]
—— *See, also,* ITALY.

NEW ZEALAND. Specifications of inventions. 3 v., 1861–75. [Plates bound with text.]
Vol. 1, specifications Nos. 1–207, 1861–73.
Vol. 2, specifications Nos. 208–222, 1874.
Vol. 3, specifications Nos. 223–260, 1875.

NORWAY. Patenter. Bekjendtgjörelser fra departementet for det Indre. Följer Polyteknisk Tidsskrift for 1876, 23de Årgang. [Text and plates.]
—— Polyteknisk Tidsskrift, 1870–75.
—— *See, also,* NORWAY.

UNITED STATES. List of patents, 1790–1836, 1 v.
—— Official gazette of the patent office, 1872–77, 11 v.; No. 122,304 to 192,555.
—— Reports of the commissioners of patents, 1837–1871. 1837–42, in 1 v.; 1843–53, 1 v. each year; from 1854, illustrations published separately, making 2 to 4 v. a year. Numbering of patents begins with year 1843, at No. 2901; to 122,303, 1871.
—— Specifications of patents from Apr. 10, 1790, to July 17, 1877, v. 1–708—; No. 1–193,310. In ms. from v. 1–209, Apr. 10, 1790, to Nov. 18, 1866. Drawings published with text since 1868. Reissues, v. 1–26; from v. 22, drawings separate. Designs, v. 1–21. Trademarks, v. 1–10. [The specifications are deposited in the record room.]
—— Subject matter index of United States patents, 1790–1873, 3 v.
—— *See, also,* UNITED STATES. **Interior dept.** Patent office.

VICTORIA. Abstracts of specifications. 1 v., 1854–66. A–B only completed.
—— Patents and patentees. v. 1–8, 1867–73. Specifications Nos. 1–1861.
—— *See, also,* VICTORIA.

Digitized by Google

PATENTS and other privileges, etc. *See, also,* **Abhandlungen** der königl. techn. Deputation für Gewerbe; **Annales** de la propriété industrielle; PARIS, **Bulletin** de la Société d'encouragement pour l'industrie nationale; **Génie** industriel, Le; **Journal** des inventeurs; MUNICH. **Kunst-** und Gewerbe-Blatt; HANOVER, **Mittheilungen** des Gewerbe-Vereins; **Polytechnisches** Centralblatt; **Dingler, Polytechnisches** Journal; PRUSSIA, **Repertorium** der technischen Literatur, Schubarth and Kerl; **Technologiste,** Le; BERLIN, **Verhandlungen** des Vereins zur Beförderung des Gewerbfleisses.

PATENTS (for inventions), Abolition of. *See* **Recent** discussions.

——— Abridgments English patents. *See* GREAT BRITAIN. **Great** seal patent office; *also,* **Patents** and other privileges.

——— Abstracts of English and colonial specifications, relating to the preservation of food. *See* **Archer,** William Henry.

——— Abstracts of specifications of patents applied for, from 1854 to 1866. *See* VICTORIA

——— Alphabetical indexes of patentees. *See* GREAT BRITAIN. **Great** seal patent office.

——— American artisan and patent record. *See* **American.**

——— American journal of improvements in the useful arts, and mirror of the patent office. *See* **American** journal.

——— American museum, containing a list of patents. *See* **American** museum.

——— American patent system. *See* **Howson,** H. and C.

——— Annales de la propriété industrielle, artistique et littéraire. *See* **Annales.**

——— Appendix to specifications of English patents for reaping machines. *See* **Woodcroft,** Bennet.

——— Beschreibung der Erfindungen u. s. w. *See* AUSTRIA; *also,* **Patents** and other privileges.

——— Bollettino industriale del regno d'Italia. *See* ITALY; *also,* **Patents** and other privileges.

——— Brevets d'invention; projet de M. Boutarel. *See* **Jobard,** J. B. A. M.

——— Brief inquiry into the American patent system. *See* **Howson,** Henry and Charles.

PATENTS (for inventions). Canada patent office. Rules, regulations, and forms. *See* CANADA; *also,* **Patents** and other privileges.

——— Canadian patent office record. *See* CANADA; *also,* **Patents** and other privileges.

——— Catalogue des brevets d'invention. *See* FRANCE. **Ministère** de l'intérieur, d'agriculture, etc.

——— Catalogue des spécifications. *See* FRANCE. **Ministère** de l'intérieur, d'agriculture, etc.

——— Catalogue showing the subject or title of every patent granted by the government prior to the year 1857. *See* UNITED STATES. **Interior** dept. Patent office.

——— Chronological indexes of. *See* GREAT BRITAIN. **Great** seal patent office.

——— Code général de la propriété industrielle. *See* **Blanc,** Étienne, and **Beaume,** Alexandre.

——— Code international de la propriété industrielle. *See* **Pataille,** J., and **Huguet,** A.

——— Commissioner of, Charges against. *See* UNITED STATES. **Congress.**

——— Commissioners of patents' journal. *See* GREAT BRITAIN. **Great** seal patent office.

——— Defence of the United States patent system, and our country's debt to patents. *See* **United** States patent association.

——— Description des machines et procédés. Loi de 1791. *See* FRANCE. **Ministère** de l'intérieur, d'agriculture, etc.; *also,* **Patents** and other privileges.

——— Description des machines et procédés. Loi de 1844. *See* FRANCE. **Ministère** de l'intérieur, d'agriculture, etc.; *also,* **Patents** and other privileges.

——— Descriptions des machines et procédés. Tables. *See* FRANCE. **Ministère** de l'intérieur, d'agriculture, etc.

——— Digest of, issued by the United States from 1790 to 1841. *See* UNITED STATES. **Interior** dept. Patent office.

——— Digest of United States, for cotton-bale ties. *See* **Sinsabaugh,** L. W., and **Tipton,** T. C.

——— Digest of United States, for paving and roofing compositions. *See* **Sinsabaugh,** L. W.

——— Digest of United States, for sewing machine attachments. *See* **Gregory,** George W.

Digitized by Google

PATENTS (for inventions), Digest of United States, relating to breech loading arms, from 1836 to 1873. *See* **Stockbridge**, V. D.

——— Engravings to the report for 1854. Arts and manufactures. *See* **Gritzner**, M. C.

——— Die Erfindungspatente. *See* **Böhmert**, Victor v.

——— État général des brevets d'invention 1791-1812. *See* FRANCE. **Ministère** de l'intérieur, d'agriculture, etc.

——— Exposition of the rights of patentees of various sewing machines, and of the rights of the public. *See* Singer, Isaac M., and co.

——— Illustrations of the report of the commissioner of patents. *See* **Jewett**, E. R.

——— in New Zealand, from 1861 to 1874. *See* NEW ZEALAND; *also*, **Patents** and other privileges.

——— Informe de la oficina de patentes de invencion, 1867. *See* BUENOS AYRES.

——— Inquiry into the nature of patent rights. *See* **Sinnett**, A. P.

——— Instruction sur les brevets d'invention, de perfectionnement et d'importation. *See* **Instruction.**

——— L'invention, journal de la propriété industrielle. *See* **Invention, L'.**

——— Inventor's advocate and patentee's recorder. *See* **Inventor's** advocate.

——— Inventor's and patentee's guide. *See* **Reigart**, J. Franklin.

——— Inventor's guide. *See* **Phillips**, Willard.

——— Journal of the Franklin institute. *See* **Franklin** institute.

——— Language of specifications of letters patent for inventions; with the authorities and decisions in all the important and latest cases. *See* **Macgregor**, J.

——— List of patents in England, for inventions in the arts, manufactures, etc., granted during the present century, including those now in force. *See* **Pritchard**, Andrew.

——— List of United States, from 1790 to 1828, alphabetically arranged. *See* **Elliot**, S. A.

——— List of United States, from 1790 to 1830; act of congress and decisions of the courts. *See* UNITED STATES. **Interior** dept. Patent office.

——— List of United States, from 1790 to 1836. *See* UNITED STATES. **Interior** dept. Patent office.

PATENTS (for inventions). Liste des brevets d'invention, 1808-39. *See* **Archives** des découvertes.

——— London journal of arts and sciences. *See* **London** journal.

——— Manuel des brevetés. *See* **Perpigna**, A.

——— Le monautopole. *See* **Jobard**, J. B. A. M.

——— Norway. Patenter. *See* NORWAY; *also*, **Patents** and other privileges.

——— Notices of some letters patent from the earliest times to the reign of Queen Anne. *See* **Progress** of machinery and manufactures in Great Britain.

——— Nouvelle loi des patentes. *See* **Gardissal.**

——— of Canada, from 1824 to 1855. *See* CANADA.

——— Our country's debt to. *See* **Howson**, Henry.

——— Patent journal and inventor's magazine. *See* **Patent** journal.

——— The patent question under free trade; a solution of difficulties by abolishing or shortening the inventor's monopoly. *See* **Macfie**, R. A.

——— Patentable invention and scientific evidence. *See* **Spence**, W.

——— Patentee's manual. *See* **Johnson**, James and J. H.

——— Patentee's manual for Canada. *See* CANADA.

——— Patents and patentees; subject-matter index, 1854-66. *See* VICTORIA; *also*, **Patents** and other privileges.

——— Progress of machinery and manufactures in Great Britain as exhibited in letters patent. *See* **Weale's papers on engineering, v. 5.**

——— Property in designs and inventions. *See* **Webster**, Thomas.

——— Recueil de la Société polytechnique. Répertoire des brevets d'invention. *See* PARIS.

——— Recueil spécial des brevets d'invention, publié en exécution de l'article 20, de la loi du 24 mai 1854. *See* BELGIUM; *also*, **Patents** and other privileges.

——— Reference index of 1617-1852. *See* GREAT BRITAIN. **Great** seal patent office.

——— Répertoire des brevets d'invention. *See* **Moléon**, J. G. V. de. Recueil industriel, etc.

Digitized by Google

PATENTS (for inventions), The repertory of. *See* **Repertory** of patent inventions.

—— Report of the commissioner of, to the United States senate on steam-boiler explosions. *See* UNITED STATES. **Interior** dept. Patent office.

—— Reports of commissioners of. *See* GREAT BRITAIN. **Great** seal patent office.

—— Review of our patent system. *See* **Richards**, J.

—— Specifications of. *See* GREAT BRITAIN. **Great** seal patent office; *also*, **Patents** and other privileges.

—— Specimens of a new plan of publishing the annual reports of the United States patent office. *See* **Gritzner**, M. C.

—— Subject matter index of patents issued from 1790 to 1873 by the United States patent office. *See* UNITED STATES. **Interior** dept. Patent office.

—— Subject matter indexes of. *See* GREAT BRITAIN. **Great** seal patent office.

—— Subject matter of letters patent. *See* **Webster**, T.

—— Supplement to the series of letters patent. *See* GREAT BRITAIN. **Great** seal patent office.

—— Table of, granted in Great Britain, from 1617 to 1858. *See* GREAT BRITAIN. **Great** seal patent office.

—— Traité de la contrefaçon en tous genres. *See* **Blanc**, Étienne.

—— Treatise on the specification of a patent. *See* **Spence**, W.

—— United States. *See* **Howson**, Henry and Charles.

Patera, Adolph. Ueber Flammenschutzmittel, und über einige Versuche zwei neue Flammenschutz-Praeparate in die Praxis einzuführen. 8°. *Wien*, 1871. pp. 34.

Paterson, John. The calculus of operations. 8°. *Albany*, 1850.

PATHOLOGY. *See, also,* **Medicine** *and* **Physiology.**

—— and therapeutics. *See* **Dickson**, Samuel Henry.

—— Elements of. *See* **Chomel**, A. F.

—— Elements of general. *See* **Stillé**, Alfred.

—— A treatise on. *See* **Henlé**, J.

Pâtissière (La) de la campagne et de la ville, suivie de l'art de faire le pain d'épices, les gaufres et les oublies. 2e éd. 12°. *Paris*, 1825.

Patronymica Britannica; a dictionary of family names of the United Kingdom. *See* **Lower**, Mark Antony.

Pattee's patent. The new departure; two horse, straddle row, tongueless cultivator. 8°. *Monmouth, Ill., n. d.* pp. 32.

Patten, William. The complete slide rule instructor; containing 300 questions and solutions for the improved slide rule. 21°. *London*, 1858.

PATTERN drawing. Muster- und Decorationszeichnungen. F. Lieb. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

—— pictures. Kunstgewerbliche Muster-Bilder. *See* **Pfau**, Ludwig.

Patterson, H. S. Types of mankind; contributions by. *See* **Nott**, J. C., and **Gliddon**, George R.

Patterson, Lawson B. Twelve years in the mines of California, embracing a general view of the gold region, with practical observations on hill, placer and quartz diggings, and notes on the origin of gold deposits. 12°. *Cambridge*, 1862.

Paul, Benjamin H. Elements of geology; transl. by. *See* **Bischof**, K. G. **Cavendish society publications.**

Paulet, Jean. Art du fabriquant d'étoffes de soie, par. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 23, 28, also 9 and 15.**

Pauli, F. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH. **Polytechnischer** Verein.

Pauli, Simon. A treatise on tobacco, tea, coffee, and chocolate; transl. by Dr. James. 12°. *London*, 1746.

Paulin-Desormeaux. *See* **Desormeaux**, A. O. Paulin.

PAVEMENTS, Specimens of tile. *See* **Shaw**, Henry.

PAVING. Manuel du paveur. *See* **Toussaint. 83 Manuels Roret.**

—— Der Stein- oder Dammsetzer. *See* **Matthaey**, C. L. **26 Neuer Schauplatz der Künste.**

PAVING stones, The natural history of. *See* **Science lectures for the people, series 2.**

Payen, Anselme. Précis de chimie industrielle. T. 1, 2. 2e éd. *Illus.* 8°. *Paris*, 1851. 3e éd., 1855. 4e éd., 1859.

—— Die Runkelrüben-Branntweinbrennerei. Nach dem Französischen und mit

Digitized by Google

Payen, Anselme—Continued.
Benutzung französischer und deutscher Materialien. Bearbeitet von Chr. Heinrich Schmidt. *Illus.* 8°. *Weimar*, 1855. **221 Neuer Schauplatz der Künste.**

——— Traité complet de la distillation des principales substances qui peuvent fournir de l'alcool. 8°. *Paris*, 1858.

Payne, R. G. Report to the general assembly on the condition of railroads in Tennessee. 8°. *Nashville*, 1857. pp. 36.

Peacock, George. Life of Thomas Young. 8°. *London*, 1855.

——— Miscellaneous works of the late Thomas Young; ed. by. *See* **Young,** Thomas.

Peacock, R. A. Researches in hydraulics. *See* **Weale's papers on engineering, v. 5.**

Peake, James. Rudiments of naval architecture. 2 v. 12°. *London*, 1849. **Weale's series, Nos. 51-53.**

Peale, Rembrandt. Graphics. The art of accurate delineation; a system of school exercise for the education of the eye and the training of the hand. 12°. *Philadelphia*, 1845.

Peard, —. The home book. *See* **Valentine,** R.

PEARL-fisheries of Ceylon. *See* **Steuart,** James.

PEARLS. Kunst des Goldarbeiters, etc. Anhang über Edelsteine und Perlen. *See* **Kulmer,** Rodolf v. **8 Neuer Schauplatz der Künste.**

PEASANT dwellings. Bauernhaus mit Einrichtung und Geräthe. Von K. J. Schröer. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Peaslee, E. R. Human histology in its relations to descriptive anatomy, physiology and pathology. 8°. *Philadelphia*, 1857.

PEAT. Art du tourbier, par J. M. Roland de la Platière. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 19.**

——— as an article of fuel. *See* **Leavitt,** T. H.

——— Die Compression des Torfes und der Braunkohle, etc. *See* **Leo,** Wilhelm.

——— A treatise on the nature and uses of peat, and the preparation of peat for fuel; embodying the best scientific and the latest practical results. 12°. *New Haven, Conn.*, 1866.

Pechar, J, and **Pecz,** A. Mineral-Kohle. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

Peck, William G. Mathematical dictionary. *See* **Davies,** C.

Peckston, T. S. The theory and practice of gas-lighting: containing much original matter relative to coal-gas, and an entirely new treatise on the economy of the gases, procured for illuminating purposes, from oil, turf, etc. 2d ed. 8°. *London*, 1823.

Péclet, Jean Claude Eugène. Erfindungen und Erfahrungen über Feuerungs-, Erwärmungs- und Ventilations-Anlagen in Privat- und öffentlichen Gebäuden. Nebst Bemerkungen über die Heizung mit Leuchtgas, Wasserstoffgas und einer Uebersicht der jetzt in verschiedenen Ländern üblichen Heiz- und Kochapparate. Nach den 'Nouveaux documents relatifs au chauffage et à la ventilation' deutsch bearbeitet von Carl Hartmann. *Illus.* 8°. *Weimar*, 1854. **212 Neuer Schauplatz der Künste.**

——— Grundsätze der Feuerungskunde. Mit Berücksichtigung des deutschen Bedürfnisses. Nach der 2ten Auflage des 'Traité de la chaleur' deutsch bearbeitet von Carl Hartmann. *Illus.* 8°. *Weimar*, 1846. **142 Neuer Schauplatz der Künste.**

——— Die Kunst der Gebäude-, Zimmer- und Strassenerleuchtung durch Oel, Talg, Wachs und Gas. Verfertigung der einfachsten und neuesten Feuerzeuge. Nach dem Französischen des Péclet; frei bearbeitet von Joh. Christoph Gottlob Weise. 2te Auflage von Carl Hartmann. *Illus.* 8°. *Weimar*, 1847. **40 Neuer Schauplatz der Künste.**

——— Nouveaux documents relatifs au chauffage et à la ventilation des établissements publics, suivis de nouvelles recherches sur le refroidissement et la transmission de la chaleur; pour servir de supplément à la 2de éd. du "Traité de la chaleur". 4°. *Paris*, 1853.

——— Traité de la chaleur considérée dans ses applications. T. 1, 2. 2e éd. *Illus.* Texte, 8°; pl., fol. *Paris*, 1843. Also, 3e éd. *Bruxelles*, 1845. Also, 3e éd. *Paris*, 1860-61.

——— Traité de l'éclairage. *Illus.* 8°. *Paris*, *n. d.*

Digitized by Google

Péclet, Jean Claude Eugène. Traité élémentaire de physique. T. 1, 2 [et atlas]. 4e éd. 8°. *Paris*, 1847.

——— Treatise on heat. *See* **Weale's papers on engineering, v. 2, 3.**

Peet, Harvey Prindle. Course of instruction for the deaf and dumb. 24°. *New York*, 1849.

Peez, Alex., and **Glogau,** Ludwig. Baumwollwaaren. Wirkwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Peigné, A. Dictionnaire abrégé des inventions et des découvertes dans les sciences et dans les arts. T. 1, 2. [Bound in 1 v.] 24°. *Paris*, 1836.

Peirce, Benjamin. An elementary treatise on plane and solid geometry. 12°. *Boston*, 1867.

——— An elementary treatise on plane and spherical trigonometry, with their applications to navigation, surveying, heights and distances, and spherical astronomy. New ed. 8°. *Boston and Cambridge*, 1852.

——— A system of analytic mechanics. 4°. *Boston*, 1855.

Peirce, Bradford K. Trials of an inventor. Life and discoveries of Charles Goodyear. 12°. *New York*, 1866.

Peirce, C. H. Examinations of drugs, medicines, chemicals, as to their purity and adulterations 12°. *Cambridge*, 1852.

Peirce, Charles. A meteorological account of the weather in Philadelphia, from Jan. 1st, 1790, to Jan. 1st, 1847. 12°. *Philadelphia*, 1847.

Peirce, James Mills. A text book of analytic geometry, on the basis of Prof. Peirce's treatise. 8°. *Cambridge*, 1857.

Pelham, William. A system of notation representing the sounds of alphabetical characters, by a new application of the accentual marks in present use, with such additions as were necessary to supply deficiencies. 12°. *Boston*, 1808.

Péligot, Eugène. Le verre; son histoire, sa fabrication. 8°. *Paris*, 1877.

Pellatt, Apsley. Curiosities of glass-making: with details of the processes and productions of ancient and modern ornamental glass manufacture. sm. 4°. *London*, 1849.

Pelouze, E. L'art de construire les fourneaux d'usines. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 17.**

Pelouze, E. L'art de fabriquer en pierre factice. 2e éd. 8°. *Paris*, 1829. **Encyclopédie populaire, v. 18.**

——— L'art du chauffage domestique et de la cuisson économique des alimens. *Illus.* 2e éd. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 21.**

——— Le fumiste. L'art de construire les cheminées, de corriger les anciennes et de se garantir de la fumée. 2e éd. 18°. *Paris*, 1829. **Encyclopédie populaire, v. 16.**

——— Secrets modernes des arts et métiers; ouvrage comprenant les découvertes les plus récentes dans les arts industriels et leur application. T. 1–3. 3e éd. 18°. *Paris*, 1840.

Pelouze, J., and **Fremy,** E. General notions of chemistry; transl. from the French by Edmund E. Evans. 12°. *Philadelphia*, 1854.

Pembroke, Henry, *Earl* of. Military equitation, or a method of breaking horses and teaching soldiers to ride; designed for the use of the army. *Illus.* 3d ed. sm. 4°. *London*, 1778.

PENAL code. Codice penale pel regno d'Italia. *See* ITALY.

Pengelly, William. Kent's cavern. A lecture. *See* **Science lectures for the people, series 4.**

——— The time which has elapsed since the era of the cave men of Devonshire. *See* **Science lectures for the people, series 7.**

Penman's manual; being a new theory and system of practical penmanship, by a business penman. sm. 4°. *New York*, 1859. pp. 36.

PENMANSHIP, Key to practical. *See* **Spencer,** Platt R.

——— Manuel de calligraphie, méthode de Carstairs. *See* **Trémery. 111 Manuels Roret.**

Penn, William, Life of. *See* **Life.**

Pennsylvania Dutch and other essays. *See* **G.**

——— hospital. Reports. v. 1, 2, 1868–69. 8°. *Philadelphia*, 1868–69.

——— hospital for the insane, near Philadelphia. Code of rules and regulations for the government of those employed in the care of the patients. 2d ed. 12°. *Philadelphia*, 1850.

Digitized by Google

PENNSYLVANIA hospital for the insane. Reports for 1851–1875, by Thomas S. Kirkbride, physician to the institution. 8°. *Philadelphia*, 1852-76.

——— Map of the oil district of. *See* **Plumb**, H. S.

——— Map of the oil region of. *See* **Map.**

——— railroad co. 8th annual report of the directors of the company to the stockholders, Feb. 5th, 1855. 8°. *Philadelphia*, 1855.

——— society for the promotion of internal improvement, Reports on canals, etc., made to the. *See* **Strickland**, W.

——— steel company. Manufacturers of hammered steel rails. With supplement. 8°. *Philadelphia, n. d.*

Penny (The) magazine of the society for the diffusion of useful knowledge. v. 1-14, 1832-45. *Illus.* roy. 8°. *London*, 1832-45.

——— (The) mechanic. A magazine of the arts and sciences. v. 1. 8°. *London*, 1837.

Pensées et pièces fugitives sur différents sujets. 18°. *Paris*, 1845.

PENSION laws now in force, relative to invalid, navy, revolutionary, and other pensions. *See* UNITED STATES. **Interior** dept. Pension office.

PENTONVILLE prison, England, Reports on. *See* GREAT BRITAIN. **Surveyor** general of prisons.

PEOPLE (The) the sovereigns. *See* **Monroe**, James.

Pepper, John Henry. The playbook of metals, including personal narratives of visits to coal, lead, copper, and tin mines; with a large number of interesting experiments relating to alchemy, and the chemistry of the fifty metallic elements. 12°. *London*, 1861.

PERCUSSION and auscultation, and the physical diagnosis of diseases affecting the lungs and heart. *See* **Flint**, Austin.

Percy, A. R. Allgemeines chemisch-technisch-ökonomisches Recept-Lexikon. 8°. *Nürnberg*, 1866.

Percy, John. Ausführliches Handbuch der Eisenhüttenkunde. Gewinnung des Roheisens und Darstellung des Schmiedeeisens und Stahls, unter Berücksichtigung der englischen Verhältnisse. Bearbeitet von Hermann Wedding. 2. Abth. *Illus.* 8°. *Braunschweig*, 1864. B. 2. Die Metallurgie, Percy.

Percy, John. Die Metallurgie des Bleies und die Scheidung des Silbers vom Blei. Übertragen und bearbeitet von C. Rammelsberg. Mit Holzstichen und einem Diagramm. 8°. *Braunschweig*, 1872. B. 3. Die Metallurgie, Percy.

——— Metallurgy. The art of extracting metals from their ores, and adapting them to various purposes of manufacture. [P. 1.] Fuel; fire-clays; copper; zinc; brass; etc. [P. 2.] Iron and steel. *Illus.* 8°. *London*, 1861-64.

——— The metallurgy of lead; embracing desilveration and cupellation. 8°. *London*, 1870.

Perdonnet, Albert Auguste. Dictionnaire de l'industrie. *See* **Baudrimont**, A., and others.

——— Railroad accidents; introduction by. *See* **With**, E.

——— Traité élémentaire des chemins de fer. T. 1, 2. 2e éd. 8°. *Paris*, 1858-60.

——— Translation of 'Portefeuille de l'ingénieur des chemins de fer,' par. *See* **Brees**, S. C. Railway practice.

Pereira, Jonathan. The elements of materia medica and therapeutics. 3d American edition enlarged by the author, including notices of most of the medicinal substances, and forming an encyclopædia of materia medica. Edited by Joseph Carson. 2 v. 8°. *Philadelphia*, 1852-54.

——— Lectures on polarized light; with a lecture on the microscope. Edited by Baden Powell. *Illus.* 2d ed. 8°. *London*, 1851.

——— A treatise on food and diet; with observations on the dietetical regimen suited for disordered states of the digestive organs; and an account of the dietaries of some of the principal metropolitan and other establishments for paupers, lunatics, criminals, children, the sick, etc. 8°. *London*, 1843.

Perels, Emil. Die Anwendung der Dampfkraft in der Landwirthschaft. 8°. *Halle*, 1872.

——— Die Fortschritte auf dem Gebiete des landwirthschaftlichen Maschinenwesens in den Jahren 1863–65. 4°. *Berlin*, 1865.

——— Handbuch des landwirthschaftlichen Wasserbaus. *Illus.* 8°. *Berlin*, 1877.

——— Die landwirthschaftlichen Maschinen und Geräthe auf der Weltausstellung zu

Digitized by Google

Perels, Emil—Continued.

Paris, 1867. Bericht, erstattet dem königlich preussischen Ministerium für die landwirthschaftlichen Angelegenheiten. *Illus.* 4°. *Berlin,* 1867. Th. 2. Berichte über den landwirthschaftlichen Theil der Pariser Weltausst. von 1867.

Perez-Rozales, Vincent. Essai sur le Chili. 8°. *Hambourg,* 1857.

PERFUMERY. The French perfumer. *See* **French** perfumer.

——— its manufacture and use. *See* **Morfit,** Campbell.

——— Manuel du parfumeur. **78 Manuels Roret.**

——— Treatise on. *See* **Pradal,** P., and **Malepeyre,** F.

——— Der vollkommene Parfümeur. *See* **Vollkommene. 16 Neuer Schauplatz der Künste.**

Pericles, The age of. *See* **Lloyd,** William Watkins.

Perini, Giacomo. Destillirkunst und Liqueurfabrication; hrsg. v. *See* **Schedel,** C. F. B. **24 Neuer Schauplatz der Künste.**

——— Der Schweizerzuckerbäcker. *Illus.* 8°. *Weimar,* 1852. **191 Neuer Schauplatz der Künste.**

——— Der vollkommene Conditor; umgearb. v. *See* **Eupel,** J. C. **1 Neuer Schauplatz der Künste.**

PERIODICAL literature, An index to. *See* **Poole,** W. F.

——— ——— Catalogne de journaux publiés à Paris. *See* **Gébé,** Victor.

PERIODICALS. *For more complete list of series, and volumes in each, see under each entry in its place in the catalogue; as,* **American** Architect; **British** quarterly review, etc.

American architect and building news. (Weekly.) 2 v. *Boston,* 1876–77——.

American bibliopolist. (Bimonthly.) *New York,* 1872–77——.

American bookseller. (Semimonthly.) *New York,* 1877——.

American chemist. (Monthly.) 6 v. *New York,* 1871–76.

American farmer. (Monthly.) 24 v. *Baltimore,* 1819–61. [Incomplete.]

American gaslight journal. (Semimonthly.) 24 v. *New York,* 1859–77——.

American journal of medical science. (Quarterly.) 77 v. *Philadelphia,* 1842–77——.

American journal of microscopy. (Monthly.) 2 v. *New York,* 1876–77——.

American journal of pharmacy. (Monthly.) 46 v. *Philadelphia,* 1831–77——.

PERIODICALS—Continued.

American journal of photography. 14 v. *New York,* 1855–65. [Incomplete.]

American library journal. (Monthly.) *New York,* 1877——.

American literary gazette and publishers' circular. (Monthly.) 18 v. *Philadelphia,* 1863–71.

American manufacturer and iron world. (Weekly.) *Pittsburg and New York,* 1875–77——.

American railroad journal. (Weekly.) 50 v. *New York,* 1831–77——.

American railway review. 5 v. *New York,* 1859–62.

American society of civil engineers. Transactions and proceedings. (Monthly.) 5 v. *New York,* 1868–76——.

Anales del ministerio de fomento. (Quarterly.) *Mexico,* 1877——.

Annalen der Chemie und Pharmacie. (Monthly.) 133 Bde. *Heidelberg, Leipzig,* 1846–77——.

Annalen der Physik und Chemie. (Monthly.) [Gren's and Gilbert's.] 76 Bde. *Halle,* 1799–1824. Poggendorff's. 160 Bde. *Leipzig,* 1824–77——.

Annales de chimie et de physique. (Monthly.) 280 v. *Paris,* 1789–1877——.

Annales de la colonisation algérienne. (Annual.) 5 v. *Paris,* 1852–54.

Annales de la propriété industrielle, artistique et littéraire. (Monthly.) 21 v. *Paris,* 1853–76——.

Annales des mines. (Bimonthly.) 70 v. *Paris,* 1827–74. [Incomplete.]

Annales des sciences de la Société royale de Lyon. 17 v. *Lyon,* 1838–55.

Annales industrielles. (Monthly.) 6 v. *Paris,* 1872–77——.

Annals of electricity. Sturgeon. 10 v. *London,* 1837–43.

Année scientifique. (Annual.) 22 T. *Paris,* 1857–77——.

Annual report of Leeds philosophical and literary society. Reports of council. *Leeds,* 1871–74.

Annual report of Royal Cornwall polytechnic society, 18 reports. *Falmouth,* 1834–75——. *See* FALMOUTH. [Incomplete.]

Anthony's photographic bulletin. (Monthly.) 7 v. *New York,* 1871–77——.

Anthropological review. (Quarterly.) 7 v. *London,* 1863–69. Continued as Journal of the Anthropological institute.

Appleton's journal. (Monthly.) *New York,* 1875–77.

Architects and mechanics' journal. 4 v. *New York,* 1859–61.

Archiv für Mineralogie. 26 Bde. *Berlin,* 1829–54.

Archives néerlandaises des sciences. 5 T. *La Haye,* 1872–76. [Incomplete.]

Art journal. (Monthly.) 31 v. *London,* 1847–77——.

Art, pictorial and industrial. (Monthly.) 5 v. *London,* 1871–75.

Athenæum. (Weekly.) 65 v. *London,* 1832–77——. [1839–42 missing.]

Atlantic monthly. 32 v. *Boston,* 1857–73.

Atti della Accademia dei Lincei. 1 v. *Rome,* 1877——. *See* ROME.

Atti della Accademia Gioenia. 9 T. *Catania,* 1867–76——. *See* CATANIA.

Digitized by Google

PERIODICALS—Continued.

Bayerisches Industrie- und Gewerbe-Blatt (Monthly.) 9 Bde. *München*, 1869-77——. *See* MUNICH.

Bericht über die Fortschritte der Eisenhütten-Technik. Kerpely. (Annual.) *Leipzig*, 1866-77——.

Berliner entomologische Zeitschrift. (Quarterly.) 16 Bde. *Berlin*, 1861-76——.

Bibliographie de la France. (Weekly.) 27 v. *Paris*, 1850-77——.

Braithwaite's retrospect of medicine. (Semiannual.) 75 v. *London*, 1841-76——.

Brewers' guardian. (Weekly.) *London*, 1877——.

British and foreign medico-chirurgical review. (Quarterly.) 48 v. *London*, 1849-77——. [Incomplete.]

British journal of photography. (Weekly.) 24 v. *London*, 1854-77——.

British journal photographic almanac. (Annual) *Liverpool*, 1863-76——.

British quarterly review. (American republication.) 7 v. *New York*, 1871-77——.

Builder. (Weekly.) 35 v. *London*, 1843-77——.

Building chronicle. 2 v. *Edinburgh*, 1855-56.

Bulletin de la Société chimique de Paris. (Monthly.) 29 T. *Paris*, 1861-77——. *See* PARIS.

Bulletin de la Société d'acclimatation. (Monthly.) 13 T. *Paris*, 1854-75. *See* PARIS

Bulletin de la Société de la Sarthe. (Annual.) 8 T. *Le Mans*, 1867-76——. *See* LE MANS.

Bulletin de la Société française de la photographie 9 T. *Paris*, 1855-63. *See* PARIS.

Bulletin des séances de la Société impériale d'agriculture. 5 T. *Paris*, 1846-48, 1864-65. *See* FRANCE.

Bulletin of the Boston public library. (Monthly) *Boston*, 1877——.

Canadian patent office record. (Monthly.) 5 v. *Ottawa*, 1873-77——. *See* CANADA.

Carriagebuilders and harnessmakers' art journal. (Monthly.) 4 v. *London*, 1859-62.

Centralblatt für die gesammte Landeskultur. *Prag*, 1853-62. *See* PRAGUE.

Centralblatt der Papier-Fabrikation. (Semimonthly.) 21 Bde. *Dresden, Halle a. d. S.*, 1850-76——.

Chemical gazette. 17 v. *London*, 1842-59.

Chemical news. (Weekly.) 37 v. *London*, 1860-77——.

Chemist. 4 v. *London*, 1854-57.

Civil engineer and architect's journal. 30 v. *London*, 1837-67.

Civilingenieur. (Monthly.) 23 Bde. *Freiberg*, 1848-77——.

Coachmakers' illustrated monthly magazine. 3 v. *Columbus*, 1855-57.

Commissioner of patent's journal. (Semiweekly.) 25 v. *London*, 1854-77——. *See* GREAT BRITAIN. **Great seal patent office.**

Comptes rendus. (Weekly.) 84 T. *Paris*, 1835-77——. *See* PARIS. Académie des sciences.

Contemporary review. (Monthly.) 8 v. *London*, 1872-76——.

Correspondenzblatt des Natur-Vereins, Riga. (Annual.) 8 Jhrge. *Riga*, 1862-74. *See* RIGA.

PERIODICALS—Continued.

Correspondenzblatt des zoologish-mineralogischen Vereins. 8 Jhrge. *Regensburg*, 1856-67. [Incomplete.] *See* REGENSBURG.

Country gentleman. 26 v. *Albany*, 1853-65. [Continued under Cultivator and Country gentleman.]

Cultivator and country gentleman. (Weekly.) 32 v. Cultivator. [16 v. Cultivator and country gentleman.] *Albany*, 1834-77——.

Daguerreotype. 3 v. *Boston*, 1847-49.

Dental advertiser. (Quarterly.) *Buffalo*. 1877——

Dental cosmos. (Monthly.) 19 v. *Philadelphia*, 1860-77——.

Deutsche entomologische Zeitschrift. (Quarterly.) 16 Bde. *Berlin*, 1861-75——. (Formerly, Berliner entomologische Zeitschrift.)

Deutsche Industrie-Zeitung. (Weekly) 11 Bde. *Chemnitz*, 1866-76.

Deutsche Revue. (Semimonthly.) *Berlin*, 1877——.

Deutsches Maler-Journal. (Monthly) B. 1. *Stuttgart*, 1876——.

Dingler's Polytechnisches Journal. (Semimonthly.) 223 Bde. *Augsburg*, 1821-77——.

Écho du monde savant. 6 annees. *Paris*, 1838-43.

Edinburgh review. (Quarterly.) American edition. 56 v. *New York*, 1850-77——.

Electrical magazine. 1 v. *London*, 1845.

Electrician. 6 v. *London*, 1862-64.

Elsner's Chemisch-technische Mittheilungen. (Quarterly.) 31 Jahre. *Berlin*, 1846-76——.

Encyclopädische Zeitschrift des Gewerbewesens. 6 J. *Prag*, 1843-48.

Engineer. (Weekly.) 45 v. *London*. 1856-77——.

Engineering. (Weekly.) 25 v. *London*, 1866-77——.

Engineering and mining journal. (Weekly.) 16 v. *New York*, 1869-77——. [Continued from American journal of mining.]

English mechanic and world of science. (Weekly.) 10 v. *London*, 1873-77——.

Entomologische Zeitung. (Annual.) 37 v. *Stettin*, 1840-76——.

Farmer and gardener. 5 v. *Baltimore*, 1835-39.

Farmer and mechanic. 6 v. *New York*, 1847-52.

Farmers' magazine. (Monthly.) 59 v. *London*, 1848-77——.

Farmers' register. 10 v. *Sicilbanks and Petersburg*, 1831-42.

Field and forest. (Monthly.) v. 1. *Washington*, 1876——.

Fortnightly review. (Monthly) 30 v. *London*, 1865-77——.

Fortschritte der Physik. (Annual) 14 Bde. *Berlin*, 1869-77——. *See* BERLIN.

Frank Leslie's ladies' gazette. 6 v. *New York* 1854-56.

Fünfjähriger Bücher-Catalog. 3 Bde. *Leipzig*, 1861-75——. *See* **Hinrichs.**

Gaceta científica de Venezuela. (Semimonthly.) *Caracas*, 1877——.

Gaceta commercial, fabril y agrícola. (Monthly.) *Sevilla*, 1877——.

Gardener's chronicle and agricultural gazette (Weekly.) 50 v. *London*, 1841-77——.

Digitized by Google

PERIODICALS—Continued.

Gardeners' monthly and horticulturist. v. 18-19. *Philadelphia*, 1876-77——.

Gemeinnützige Wochenschrift. 21 Bde. *Würzburg*, 1851-75——. *See* WÜRZBURG.

Gewerbeblatt aus Würtemberg. (Weekly.) 2 Bde. *Stuttgart*, 1853-75——. *See* STUTTGART.

Gewerbe-Halle. (Monthly.) 5 Jhrge. *Stuttgart*, 1863-67.

Hannoversches Wochenblatt. *Hannover*, 1877——.

Harness and carriage journal. (Monthly.) 17-21. *New York*, 1874-77——.

Harper's bazaar. (Weekly.) 10 v. *New York*, 1868-77——.

Harper's monthly. *New York*, 1878——.

Historical magazine. 20 v. *Boston, New York*, 1857-76.

Horological journal. (Monthly.) 19 v. *London*, 1859-77——.

Horticulturist, 27 v. *New York*, 1848-75. Continued as Gardener's monthly and horticulturist.

Humphrey's journal of the daguerreotype. 21 v. *New York*, 1851-69.

Illustrated London news. (Monthly.) 67 v. *London*, 1842-77——.

Illustrirter Kalender. (Annual.) 19 Jhrge. *Leipzig*, 1858-76——.

Index to foreign scientific periodicals. 8 v. *London*, 1865-72. *See* GREAT BRITAIN. **Great seal patent office.**

Industrie- und Gewerbeblatt. 3 Jhre. *Grätz*, 1855-58.

Ingenieur Kalender. 6 Jahre. *Essen*, 1871-76——.

Institution of mechanical engineers. Proceedings. (Annual.) 26 v. *Birmingham*, 1851-77——. *See* BIRMINGHAM.

Iron. (Weekly.) 10 v. *London*, 1873-77——.

Jahrbuch der Erfindungen. 12 Jhrge. *Leipzig*, 1865-75——. *See* **Hirzel**, H.

Jahrbuch der geologischen Reichsanstalt. 26 Jhrge. *Wien*, 1850-76——. *See* VIENNA.

Jahrbuch der Maschinen-Technik. Jhrg. 1-4. *Halle*, 1837-76——. *See* **Neumann.**

Jahrbuch des naturhistorischen. Landesmuseums. 12 Hefte. *Klagenfurt*, 1852-77——. *See* KLAGENFURT.

Jahrbuch für den Berg- und Hüttenmann. 50 Jhrge. *Freiberg*, 1827-76——. *See* FREIBERG.

Jahresbericht der Agricultur-Chemie. 19 Jhrge. *Berlin*, 1858-76——. *See* **Hoffmann.**

Jahresbericht der Naturforscher-Gesellschaft zu Emden. 21 Jhrge. *Emden*, 1851-76——.

Jahresbericht des Stuttgarter Gewerbe-Vereins. 15 Jhrge. *Stuttgart*, 1863-77——.

Jahresbericht über die Fortschritte der Chemie. 29 Jhrge. *Giessen*. 1847-75——. *See* **Liebig.**

Jahresbericht über chemische Technologie. 22 Jhrge. *Leipzig*, 1855-76——. *See* **Wagner.**

Jahresbericht über die Fortschritte des Landwirthschaftlichen Maschinenwesens. *Berlin*, 1876——. *See* **Perels.**

Jahresbericht über Zuckerfabrikation. 15 Bde. *Breslau*, 1863-76——. *See* **Scheibler.**

Journal d'agriculture pratique. (Weekly.) 56 T. *Paris*, 1837-77——.

PERIODICALS—Continued.

Journal d'agriculture progressive. 2 T. *Paris*, 1852.

Journal de l'École royale polytechnique. 1 T. *Paris*, 1839. *See* PARIS.

Journal des armes spéciales. 72 T. *Paris*, 1834-69.

Journal des connaissances usuelles et pratiques. 7 T. *Paris*, 1840-43.

Journal de pharmacie et de chimie. (Monthly.) 71 T. *Paris*, 1842-77——.

Journal des inventeurs. (Semimonthly.) *Anvers*, 1876-77——.

Journal für Buchdruckerkunst. 26 Bde. (Weekly.) *Braunschweig*, 1837-76——.

Journal für practische Chemie. 123 Bde. *Leipzig*, 1834-77——.

Journal für technische Mittheilungen der Zuckerfabrikation. *Braunschweig*, 1877——.

Journal of gaslighting. (Weekly.) 29 v. *London*, 1849-77——.

Journal of the American electrical society. (Monthly.) *Chicago*, 1877——.

Journal of the Anthropological institute 6 v. *London*, 1871-77——.

Journal of the Bath and West England society. (Quarterly.) 6 v. *London*, 1859-61.

Journal of the Chemical society. (Monthly.) 32 v. *London*, 1849-77——. *See* LONDON.

Journal of the Franklin institute (Monthly.) 103 v. *Philadelphia*, 1826-77——.

Journal of the Photographic society 15 v. *London*, 1853-76. *See* LONDON.

Journal of the Royal agricultural society of England. (Semiannual.) 37 v. *London*, 1841-76——. *See* LONDON.

Journal of the Statistical society. (Quarterly.) 39 v. *London*, 1839-77——. *See* LONDON.

Journal of the Society of arts. (Weekly.) 25 v. *London*, 1853-77——. *See* LONDON.

Journal of the telegraph. (Monthly.) *New York*, 1877——.

Kunst in Gewerbe. (Monthly.) 5 Bde. *Leipzig*, 1872-76——.

Kunst- und Gewerbeblatt. 51 Bde. *München*, 1815-68. Continued as Bayerisches Industrie- und Gewerbe-Blatt. *See* MUNICH.

Landwirthschaftliche Versuchs-Stationen. (Bimonthly.) 22 Bde. *Dresden*, 1859-77——.

Lifeboat. (Quarterly.) 4 v. *London*, 1873-76——. [Incomplete.]

London-Edinburgh-Dublin philosophical magazine. (Monthly.) 91 v. *London*, 1832-77——.

London lancet. (Monthly.) 45 v. *London*, 1823-52. Amer. ed. 11 v. *New York*, 1867-77——.

London quarterly review. (Amer. ed.) 59 v. *New York*, 1848-77——.

London times. (Weekly.) *London* 1877——.

La lumière. *Paris*, 1851-61. *See* **Collection**

Manufacturer and builder. (Monthly.) 8 v. *New York*, 1869-77——.

Maschinen-Constructeur. (Monthly.) 9 Bde. *Leipzig*, 1868-76——.

Mathematical monthly. 3 v. *Cambridge*, 1859-61.

Medical news. (Monthly.) 15 v. *Philadelphia*, 1863-77——. [Incomplete.]

Mémoires de l'Académie de Montpellier. 5 T. *Montpellier*, 1855-71.

Digitized by Google

PERIODICALS—Continued.

Mémoires de la Société des sciences de Bordeaux (Annual.) 5 T. *Bordeaux*, 1865–74.

Mémoires de la Société des sciences naturelles de Cherbourg. (Annual.) 19 T. *Cherbourg*, 1853–75——

Mémoires de la Société d'agriculture de la Seine. 16 v. *Paris*, 1800–13. *See* PARIS.

Mémoires de la Société royale d'agriculture. 49 T. *Paris*, 1817–54.

Memoirs of the Literary and philosophical society of Manchester. (Annual.) 12 v. *London*, 1851–76——. *See* MANCHESTER.

Memorie del Reale istituto Lombardo di scienze. (Annual.) 11 T. *Milano*, 1843–73. *See* MILAN.

Memorie dell'Accademia delle scienze del Istituto di Bologna. (Annual) 6 v. *Bologna*, 1868–72.

Mittheilungen aus dem Gebiete der Statistik. (Annual) 6 Jhre. *Vienna*, 1868–74. *See* AUSTRIA.

Moniteur de la photographie. (Monthly.) 14 f. *Paris*, 1863–76——.

Monthly notices of the Royal Society of Tasmania. 4 v. *Hobart Town*, 1871–74——. *See* HOBART TOWN.

National (The) car builder. *New York*, 1877——.

National quarterly review. *New York*, 1877——.

Natural history review. 5 v. *London*, 1861–65.

Nature. (Weekly.) 16 v. *London*, 1870–77——.

Neueste Erfindungen und Erfahrungen. (Monthly.) 3 Bde. *Regensburg*, 1874–76——.

New-York conchmakers' magazine. 11 v. *New York*, 1859–70.

Nineteenth century. (Monthly). 2 v. *London*, 1877——.

North American review. (Quarterly.) 123 v. *Boston*, 1815–77——.

North British review. (Quarterly.) American ed. 41 v. *New York*, 185 -71.

Notes and queries. (Weekly.) 57 v. *London*, 1850–77——.

Nouvelles annales d'agriculture. 8 T. *Paris*, 1859–66.

Nova acta Regiae Societatis Upsaliensis. (Annual) 7 v. *Upsala*, 1855–73. *See* UPSALA.

Official gazette of the United States patent office. (Weekly.) 12 v. *Washington*, 1872–77——.

Ohio cultivator. 15 v. *Columbus*, 1845–59.

Operator (The). (Weekly.) 5 v. *New York*, 1875–77——.

Organ für die Fortschritte des Eisenbahnwesens. (Monthly.) 31 Bde. *Wiesbaden*, 1846–76——.

Penn monthly. 7 v. *Philadelphia*, 1870–77——.

Perry and co.'s price current (Monthly.) 6 v. *London*, 1869–76. [Incomplete.]

Philadelphia photographer. (Monthly.) 14 v. *Philadelphia*. 1864–77——.

Philosophical transactions. Royal society. (Annual.) 11 v., abridged; 135 v, full. *London*, 1705–1876——. *See* LONDON.

Photographic and fine art journal. 13 v. *New York*, 1851–60.

Photographic bulletin, Anthony's. (Monthly.) 7 v. *Vienna*, 1871–77——. *See* **Anthony's.**

Photographische Correspondenz. (Monthly.) 5 Bde. *New York*, 1871–76——.

PERIODICALS—Continued.

Photographische Mittheilungen. (Monthly.) 12 Bde. *Berlin*, 1865–77——.

Photographische Monatshefte. 2 Bde. *Braunschweig*, 1862–63.

Photographisches Journal. 22 Bde. *Leipzig*, 1854–64.

Photographic news. (Weekly.) 20 v. *London*, 1859–76——.

Photographic notes. (Weekly.) 12 v. *London*, 1856–67.

Polytechnic review. (Weekly.) 3 v. *Philadelphia*, 1876–77——.

Polytechnisches Centralblatt. 53 Bde. *Leipzig*, 1835–75——.

Polytechnische Zeitung. (Weekly.) 3 Bde. *Nürnberg*, 1839–42.

Polyteknisk Tidsskrift. (Monthly.) 7 a. *Christiania*, 1870–76——.

Popular science monthly. 11 v. *New York*, 1872–77——.

Popular science monthly supplement, 1877——.

Popular science review. (Bimonthly.) 17 v. *London*, 1862–77——.

Portefeuille économique des machines. (Monthly.) 22 v. *Paris*, 1856–77——.

Practical mag zine. (Monthly.) 7 v. *London*, 1873-77——.

Preussische Statistik. (Annual.) 29 Hfte. *Berlin*, 1861–76——. *See* PRUSSIA.

Printing times and lithographer. (Monthly.) *London*, 1877——.

Proceedings of the Literary and philosophical society of Liverpool. (Annual.) 25 v. *London*, 1845–74——. *See* LIVERPOOL.

Proceedings of the Literary and philosophical society of Manchester. (Annual.) 11 v. *Manchester*, 1862–73. *See* MANCHESTER.

Proceedings of the Philosophical society of Glasgow. (Annual.) 4 v. *Glasgow*, 1871–76——. *See* **Philosophical** society.

Publishers' circular. (Monthly.) 40 v. *London*, 1838–77——.

Publishers' weekly. 11 v. (Including Publishers' trade circular, 2 v.) *New York*, 1872–77——.

Publication industrielle des machines. Armengaud. (Annual.) 23 v. *Paris*, 1848–76——.

Quarterly journal of microscopical science. 25 v. *London*, 1853–77——.

Quarterly journal of science. 14 v. *London*, 1864–77——.

Rendiconti dell'Accademia delle scienze di Bologna. (Annual.) 4 v. *Bologna*, 1868–72.

Rendiconti dell'I. R. istituto Lombardo. (Annual.) 12 T. *Milan*, 1864–75——. *See* MILAN.

Repertorium der physikalischen Technik (Annual.) 12 Bde. *München*, 1866–76——. *See* **Carl.**

Repertorium der technischen Literatur. (Annual.) 5 Bde. *Berlin* and *Leipzig*, 1856–75——. *See* PRUSSIA.

Revue des deux mondes. (Semimonthly.) 72 T. *Paris*, 1848–49, 1867–77——.

Revue générale de l'architecture. (Bimonthly.) 33 T. *Paris*, 1840–76——.

Revue photographique. 8 T. *Paris*, 1855–63.

Digitized by Google

PERIODICALS—Continued.

Revue universelle des mines et de la métallurgie. (Monthly.) 40 T. Paris, 1857-76——.

Sanitarian. (Monthly.) 5 v. *New York*, 1873-77——.

Schriften der naturforschenden Gesellschaft Danzig. 10 Bde. *Danzig*, 1843-73.

Schriften der naturforschenden Gesellschaft Marburg. 3 Bde. *Marburg*, 1857-71.

Schriften der physikalisch-oekonomischen Gesellschaft. Jahrg. 1-13. *Königsberg*, 1860-72. *See* KÖNIGSBERG.

Science gossip. (Monthly.) 13 v. *London*, 1865-77——. *See* **Hardwicke's.**

Science observer. (Monthly.) *Boston*, 1877——.

Scientific American. (Weekly.) 52 v. *New York*, 1846-77——.

Scientific and literary review. (Bimonthly.) 12 v. *London*, 1866-77——.

Scientific mechanic. 1 v. *New York and Washington*, 1848.

Shoe and leather reporter. (Weekly.) *New York*, 1871-76——. [Incomplete.]

Skizzenbuch für den Ingenieur und Maschinenbauer. (Quarterly.) *Berlin*, 1858-77——.

Stationer. (Monthly.) 7 v. *London*, 1870-76——.

Statistisches Jahrbuch. Austria. (Annual.) 13 J. *Vienna*, 1865-77——. *See* AUSTRIA.

Technische Blätter. (Monthly.) 7 Jhrge. *Prag*, 1869-76——.

Technologiste. (Monthly.) 36 T. *Paris*, 1840-76——.

Telegraphic journal. (Monthly.) 5 v. *London*, 1873-77——.

Tijdschrift voor Indische taal-, land- und volkenkunde. 18 D. *Batavia*, 1854-70. *See* BATAVIA.

Transactions of the Institution of naval architects. (Annual.) 17 v. *London*, 1860-76——. *See* LONDON.

Transactions of the Royal Scottish society of arts. 5 v. *Edinburgh*, 1841-68. [Incomplete.] *See* **Royal.**

United States nautical magazine. 6 v. *New York*, 1854-57.

United States service magazine. 5 v. *New York*, 1864-66.

Van Nostrand's eclectic engineering magazine. (Monthly.) 19 v. *New York*, 1850-77——.

Verhandelingen van het Bataviaasch Genootschap. (Annual.) 20 D. *Batavia*, 1827-61. [Incomplete.] *See* BATAVIA.

Verhandlungen des Vereins zur Beförderung des Gewerbfleisses. (Annual.) 54 Bde. *Berlin*, 1822-75——. *See* BERLIN.

Verhandlungen der polytechnischen Gesellschaft Berlin. (Quarterly.) 21 J. *Berlin*, 1856-76——. *See* BERLIN.

Verhandlungen der Schweizerischen Naturforscher-Gesellschaft. (Annual.) 18 Bde. (Various cities.) 1858-76——. *See* SWITZERLAND.

Verhandlungen des Gewerbvereins Görlitz. (Annual.) 7 Bde. *Görlitz*, 1868-76——.

Verhandlungen des botanischen Vereins Brandenburg. (Annual.) 14 Bde. *Berlin*, 1859-73.

Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande. (Annual.) 21 Bde. *Bonn*, 1856-76——. *See* **Prussian** Rhenish provinces.

PERIODICALS—Continued.

Verhandlungen des Vereins für Eisenbahnkunde. (Annual.) 21 J. 1853-73——. *See* BERLIN.

Verzeichniss neuer Bücher, Hinrichs. (Semiannual.) 30 Bde. *Leipzig*, 1847-76——.

Vierteljahresschrift für technische Chemie. 5 J. *Quedlinburg*, 1859-63.

Water, gas and steam. (Monthly.) *Philadelphia*, 1878——.

Westminster review. (Quarterly.) 36 v. *New York*, 1850-77——.

Wochenschrift des Gewerbe-Vereins Bamberg. (Annual.) 10 Bde. *Bamberg*, 1867-76.

Wochenschrift des Oesterreichischen Ingenieur- und Architecten-Vereins. 1 Jhrg. *Wien*, 1876——. *See* VIENNA.

Wochenschrift des Vereins zur Beförderung des Gartenbaues. 12 Bde. *Berlin*, 1860-72. *See* BERLIN.

Wochenschrift für Thierheilkunde und Viehzucht. 11 Bde. *Augsburg*, 1857-67.

Workshop, The. (Monthly.) 6 v. *New York*, 1868-73.

Zeitschrift der Deutschen geologischen Gesellschaft Berlin. 22 Bde. *Berlin*, 1853-75——.

Zeitschrift des Architekten- und Ingenieur-Vereins Hannover. (Quarterly.) 22 Bde. *Hannover*, 1853-76——.

Zeitschrift des Ferdinandeums. (Annual.) 13 Bde. *Innsbruck*, 1859-76——. *See* TYROL.

Zeitschrift des Königl. sächs. statistischen Bureaus. (Annual.) 22 Jhrge. *Dresden*, 1855-76——.

Zeitschrift des Kunst- und Gewerb-Vereins München. (Monthly.) *München*, 1877——.

Zeitschrift des landwirthschaftlichen Vereins Bayern. 66 Bde. [Including Centralblatt and Wochenblatt.] *München*, 1811-76——. *See* MUNICH.

Zeitschrift des oester. Ingenieur-Vereins. (Monthly.) 28 Bde. *Vienna*, 1849-76——. *See* VIENNA.

Zeitschrift des Vereins deutscher Ingenieure. (Monthly.) 20 Bde. *Berlin*, 1857-76——. *See* BERLIN.

Zeitschrift für Berg-Hütten- und Salinenwesen. 16 Jhrge. 1854-68.

Zeitschrift für das chemische Grossgewerbe. (Annual.) 2 J. *Berlin*, 1876——.

Zeitschrift für die gesammten Naturwissenschaften. (Semiannual.) 41 Bde. *Berlin*, 1854-75——. *See* HALLE.

Zeitschrift für Fotografie und Stereoskopie. 7 Bde. *Vienna*, 1860-63.

Zeitung des Vereins Deutscher Eisenbahn-Verwaltungen. (Weekly.) 14 Bde. *Leipzig*, 1861-75. [Incomplete.] *See* LEIPSIC.

Perkins, E. E. A practical treatise on gas and ventilation. With special relation to illuminating, heating and cooking by gas. *Illus.* 12°. *Philadelphia*, 1856.

—— A treatise on haberdashery and hosiery; including the Manchester, Scotch, silk, and woollen departments. 3d ed. 8°. *London*, 1834.

Perkins, Maurice. An elementary manual of qualitative chemical analysis. 12°. *New York*, 1867.

Digitized by Google

Perkmann, R. Lehrmittel. Die Geographie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Perot and co.'s improved medical wagon exhibited at Philadelphia, 1876. *See* UNITED STATES. **War** department.

PERPETUAL motion. Perpetuum mobile; or, search for self-motive power. *See* **Dircks,** Henry.

Perpigna, A. The French law and practice of patents for inventions, improvements and importations. 8°. *Paris,* 1832.

——— Manuel des inventeurs et des brevetés. 8e éd. 8°. *Paris,* 1847.

——— Observations sur le projet de loi concernant les brevets d'invention. 8°. *Paris,* 1843.

Perrault, Claude. Les dix livres d'architecture; trad. par. *See* **Vitruvius,** Pollio M.

Perret, Jean Jacques. Art du coutelier. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 9-11.**

Perronet, Jean Rodolphe. Art de l'épinglier; avec des remarques de. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 8.**

Perrot, A. Key to Perrot's Wilhem's musical manual; embracing a full description of the different studies contained in the manual. roy. 8°. *Philadelphia,* 1855.

Perrot, A. M. Manuel du coloriste; augmenté, par E. Blanchard. 18°. *London,* 1831. **95 Manuels Roret.**

——— Manuel du dessinateur; revu et augmenté, par A. Vergnaud. *Illus.* 4e éd. 18°. *Paris,* 1836. **24 Manuels Roret.**

——— Manuel du graveur. 18°. *Paris,* 1830. **26 Manuels Roret.**

——— Manuel élémentaire pour la construction et le dessin des cartes géographiques. *Illus.* 18°. *Paris,* 1830. **12 Manuels Roret.**

Perrot de Chaumeux, L. Collodion sec, exposé de tous les procédés connus et manipulations formules suivi d'un aperçu de l'opinion des divers auteurs sur la formation de l'image photographique dans la chambre noire. 12°. *Paris,* 1863.

Perrottet, G. S. Die Indigfabrication. Aus dem Französischen übertragen von Ch. H. Schmidt. 8°. *Weimar,* 1844. **17 Neuer Schauplatz der Künste.**

Perry, Arthur Latham. Elements of political economy. 8°. *New York,* 1866.

Perry, J. R. The art of stair building, with original improvements designed to enable every carpenter in the country to learn the business by the easiest methods. 8°. *New York,* 1855.

Perry, John, engineer. Life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 1.**

Perry, John S. Defence of the United States patent system. *See* **United** States patent association.

PERSIA. Bericht von Persien. Von J. E. Polak. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

——— Die Handelsverhältnisse Persiens. *See* **Gasteiger,** Albert.

——— Persian art. *See* **Smith,** R. Murdock. **South Kensington art and science handbooks, No. 7.**

PERSONAL beauty; how to cultivate and preserve it. *See* **Napheys,** George H. [†]

Persoon, C. H. Mycologia Europea, seu completa omnium fungorum in variis Europæ regionibus detectorum enumeratio. Methodo naturali disposita descriptio succincta, synonymia selecta et observationibus criticis additis. Elaborata a. Sectio prima. 8°. *Erlangæ,* 1822.

——— Traité sur les champignons comestibles, contenant l'indication des espèces nuisibles; précédé d'une introduction à l'histoire des champignons. *Illus.* 8°. *Paris,* 1819.

Persoz, Jean François. Handbuch des Zeugdrucks und der damit verbundenen Färberei. Nach deutschen Bedürfnissen bearbeitet und mit einem ausführlichen Sachregister versehen, von Chr. H. Schmidt. 1-2. Theil. *Illus.* 8°. *Weimar,* 1848. **162,163 Neuer Schauplatz der Künste.**

——— Traité théorique et pratique de l'impression des tissus. *Illus.* T. 1-4; accompagné d'un atlas. Texte, 8°; planches, 4°. *Paris,* 1846.

PERSPECTIVE. *See* **Vredeman,** J.

——— Lehre von den Projectionen. *See* **Hertel,** A. B. **184 Neuer Schauplatz der Künste.**

——— Linear, for the use of schools and students in drawing. *See* **Ropes,** Joseph.

——— ——— Sequel to. *See* **Ropes,** Joseph.

——— ———, of form, shade, shadow, and reflection. *See* **Smith,** R. S.

Digitized by Google

PERSPECTIVE. Manuel de perspective, du dessinateur et du peintre. *See* **Vergnaud**, A. D **20 Manuels Roret.**

——— Plane and perspective drawing. *See* **Brainerd**, Jehu.

——— Practical. *See* **Practical** perspective.

——— Principles of, practically and geometrically developed. *See* **Krüsi**, Hermann.

——— Treatise on. *See* **Pyne**, G. **Weale's series, Nos. 20, 21.**

——— A treatise on practical, without the use of vanishing points. *See* **Nicholson**, Peter.

Perthes, Boucher de. Des idées innées, de la mémoire et de l'instinct. 8°. *Paris*, 1867.

Perthius, — de. Concours pour les machines hydrauliques appropriées aux usages de l'agriculture et aux besoins des arts économiques. *See* **Challan**, A. D. J. B., and others.

Perutz, H. Die Industrie der Fette und Oele. 8°. *Berlin*, 1866.

——— Die Industrie der Mineralöle, des Petroleums, Paraffins und der Harze, nebst sämmtlichen damit zusammenhängenden Industriezweigen. 8°. *Wien*, 1868.

——— Wärme- und Brennmaterialien, ihre Anwendung für industrielle Zwecke und Beschreibung der besten Rauchverbrennungs-Anlagen. *Illus.* 8°. *Berlin*, 1864.

Pescheck, H. E. Das Ganze des Steindrucks oder vollständige theoretisch-praktische Anweisung zur Ausübung der Lithographie, nebst einem Anhange von der Zinkographie, mit Zugrundelegung der ersten Auflage des bekannten Pescheck'schen Werkes nach den jetzigen Bedürfnissen ganz neu bearbeitet von Leo Bergmann. 2te Auflage. *Illus.* 8°. *Weimar*, 1843. **43 Neuer Schauplatz der Künste.**

Peschel, Carl Friedrich. Elements of physics; transl. from the German, with notes, by E. West. Part 1. Ponderable bodies. 2. Imponderable bodies; light, heat, and magnetism. 3. Imponderable bodies; electricity, electro-magnetism, and magneto electricity. 16°. *London*, 1845–46.

Peschel, Oscar. The races of man, and their geographical distribution. From the German of. 12°. *New York*, 1876.

Peschier. Dictionnaire des langues française et allemande. 3e éd., par. *See* **Mozin**, D. J.

Pesson-Maisonneuve. Manuel du pêcheur. *Illus.* 3e éd. 18°. *Paris*, 1836. **87 Manuels Roret.**

PESTH. A királyi magyar természettudományi társulat évi jelentése tagjairól és működéseiről, 1860–1861. Szerkeszté Szabó József. Kiadatott 1864. 8°. *Pesth*, 1864.

——— A királyi magyar természettudományi társulat közlönye. [v. 1, 2, ed. by J. Szabó; v. 3, ed. by A. Toth and G. Schmidt.] 8°. *Pesth.*

——— A magyar természettudományi társulat évkönyvei. [4th v., parts 1, 2, ed. by Josef Szabó.] 8°. *Pesth.*

——— Original-Abhandlungen aus dem 3ten Bande der Jahrbücher des Ungarischen naturwissenschaftlichen Vereins zu Pest, in deutscher Uebersetzung redigirt von Joseph Szabó. 8°. *Pest*, 1858.

PESTS, Farm. Feinde der Landwirthschaft. *See* **Nördlinger**, H.

Pests of the farm; being an account of the various depredating animals, birds, and insects which annoy the American farmer, with directions for their destruction. 12°. *New York*, 1852.

Petermann, C. Anlage und Ausführung von Brunnen und Wasserleitungen. 4°. *Stuttgart*, 1871.

Petermann, W. L. Deutschlands Flora, mit Abbildungen sämmtlicher Gattungen. *Illus.* roy. 8°. *Leipzig*, 1849.

Peters, John C. Notes on the origin, nature, prevention, and treatment, of Asiatic cholera. 2d ed. 12°. *New York*, 1867.

Peters, John R. Extensive view of the central flowery nation. 8°. *Philadelphia*, 1847. [?]

Peterson, *Mrs.* M. E. Preserving, pickling and canning fruit manual. 24°. *Philadelphia*, 1869.

Petiet, J. Handbuch für Locomotiven-Führer; von. *See* **Flachat**, E., and others. **127, 192 Neuer Schauplatz der Künste.**

——— Student's guide to the locomotive engine. *See* **Flachat**, E.

Petite encyclopédie des enfans, ou notions des principales sciences qu'ils doivent

Digitized by Google

Petite—Continued.
étudier par demandes et par réponses: à l'usage des écoles et pensions. 18e éd. *Illus.* 12°. *Paris*, 1833.

Peto, S. Morton. Resources and prospects of America; ascertained during a visit to the states in 1865. 12°. *New York*, 1866.

——— Taxation; its levy and expenditure, past and future; being an inquiry into our financial policy. 8°. *New York*, 1863. Also, ed. 1866.

Petrarca, Fran. Principalium contentiarum ac materiarum memoria dignarum, ex libris Francisci Petrarchæ collectarum, juxta ordinem alphabeticum, summaria brevisque annotatio. fol. *Basileæ*, 1496.

Petri, Bernhard. Die Wartung, Pflege und Zucht der Schafe. 12°. *Leipzig*, 1831.

Petri, J. G. Brunnenmeister; bearb. v. *See* **Janvier** and **Biston. 45 Neuer Schauplatz der Künste.**

——— Schlossermeister; Beiträge v. *See* **Grandpré,** L. M. J. O. de. **50 Neuer Schauplatz der Künste.**

PETRIFACTIONS and their teachings. *See* **Mantell,** Gideon Algernon.

PETROGRAPHY, Microscopical. Report by F. Zirkel. *See* UNITED STATES. **War** department.

PETROLEUM and its products. *See* **Tate,** A. Norman.

——— as an illuminator. *See* **Chandler,** C. F.

——— Coal oil and petroleum. *See* **Erni,** Henri.

——— Derrick and drill; or an insight into the discovery, development, present condition, and future prospects of petroleum. *See* **Derrick** and drill.

——— Die Petroleum-Industrie Nordamerikas. Höfer. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 8.**

——— Map of the oil district of Pennsylvania. *See* **Plumb,** H. S.

——— Map of the oil region of Pennsylvania. *See* **Map.**

——— Petrolia. *See* **Cone,** Andrew, and **Johns,** Walter R.

——— Petroleum und dessen Producte. *See* **Goppelsroeder,** Friedrich.

——— A practical treatise on coal oil, petroleum, etc. *See* **Gesner,** Abraham.

PETROLEUM zones of Italy. *See* **Fairman,** E. St. John.

PETS, Book of household. *See* **Household.**

Petsching, Hans. Kirchliche Kunst. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 23.**

Pettengell, L. M. Pettengell's newspaper directory for 1877; comprising a complete list of the newspapers and periodicals published in the United States and British America. 8°. *New York*, 1877.

Pettenkofer, Max. v. Die Chemie in ihrem Verhältnisse zur Physiologie und Pathologie. Festrede vorgetragen in der k. bayer. Akademie der Wissenschaften zu München. *München*, 1848. pp. 40.

——— Regenerations-Verfahren. *See* **Kuhn,** J. A.

——— Ueber einen neuen Respirations-Apparat. Aus den Abhandlungen der k. bayer. Akademie. *Illus.* 4°. *München*, 1861. pp. 48.

——— Ueber Ölfarbe und Conservirung der Gemälde-Gallerien, durch das Regenerations-Verfahren. 8°. *Braunschweig*, 1870.

——— Vorträge über Canalisation und Abfuhr. 1–16. Vortrag. *Illus.* 8°. *München*, 1876.

Pettigrew, J. Bell. Animal locomotion, or walking, swimming and flying. **International scientific series, v. 8.**

Pettus, John. Fleta Minor. The laws of art and nature in knowing, judging, assaying, fining, refining, and inlargiug the bodies of confined metals. 2 parts. Part 1. Assays of Lazarus Erckern. Part 2. Essays on metallick words, by. fol. *London*, 1683.

Petzholdt, Alexander. Beiträge zur Kenntniss des Inneren von Russland, zunächst in landwirthschaftlicher Hinsicht. 8°. *Leipzig*, 1854.

——— Die sogenannte Kartoffelfäule. 8°. *Dresden und Leipzig*, 1846.

Petzholdt, Alphons. Fabrication, Prüfung und Uebernahme von Eisenbahnmaterial. Ein Hand- und Hilfsbuch für Eisenbahn-Ingenieure, Maschinen- und Hütten-Techniker. Mit Vorwort von Edmund Heusinger von Waldegg. roy. 8°. *Wiesbaden*, 1872.

Petzholdt, Julius. Bibliotheca bibliographica. Kritisches Verzeichniss der das Gesammtgebiet der Bibliographie

Digitized by Google

Petzholdt, Julius—Continued.
betreffenden Litteratur des In- und Auslandes, in systematischer Ordnung. 8°. *Leipzig*, 1866.

——— Handbuch deutscher Bibliotheken, hrsg. v. *Illus. Halle*, 1853.

Peuchet. Manuel du banquier, de l'agent de change et du courtier. 18°. *Paris*, 1829. **28 Manuels Roret.**

——— Manuel du négociant et du manufacturier. 18°. *Paris*, 1829. **53 Manuels Roret.**

Peut, François Marie Hippolyte. Annales de la colonisation algérienne; publ. par. *See* **Annales.**

PEWTERER. Art du potier d'étain, par Salmon. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 13.**

Peyton, George. How to detect counterfeit bank notes, with original bank-note plates and designs. 8°. *New York*, 1856. pp. 45.

Pfaffenrath, C. von, and **Löbe,** W. Landwirthschaftliche Dorfzeitung. Hrsg. von. 5 Bde. Jhrgc. 1843-50. 4°. *Leipzig*, 1843-50.

Pfau, Ludwig. Kunstgewerbliche Muster-Bilder aus der Wiener Weltausstellung. 4°. *Stuttgart*, 1874.

Pfeiffer, Clem. Handbuch der electromagnetischen Telegraphie nach Morse-'schem System. Mit Atlas. 8°. *Weimar*, 1864. **272 Neuer Schauplatz der Künste.**

Pflug, Carl. Der landwirthschaftliche Maschinenbauer., hrsg. v. *See* **Landwirthschaftliche.**

Pflug, F. A. Wagons, für den Eisenbahn-Train der Kaiserl.-Russischen Bahn, Odessa-Kiew. Nach Angaben des Kaiserlich Russischen Staatsrath Baron von Ungern Sternberg ausgeführt in der Actien-Gesellschaft für Fabrication von Eisenbahnbedarf. l. fol. *Berlin*, 1864.

Phantom flowers. A treatise on the art of producing skeleton leaves. 12°. *Boston*, 1877.

PHARMACEUTIC chemistry. Grundriss der pharmaceutischen Chemie. *See* **Elsner,** Fritz.

Pharmaceutical journal and transactions. Ed. by Jacob Bell. v. 1-17. 1842-58. 8°. *London*, 1842-58.

Pharmacopœia of the United States of America. By authority of the medical convention held at **Washington.** 8°. *Philadelphia*, 1851. Also, 4th revision, 1860. 12°. *Philadelphia*, 1863.

——— Pharmacopie. *See* **Dictionnaire** général de la cuisine française.

——— Translation of the new London pharmacopœia: by J. B. Nevins. *See* LONDON. **Royal** college of physicians.

PHARMACY. *See, also,* **Medicine,** etc.

——— *See* PHILADELPHIA. **Internat. Exhib. 1876, Group 3**

——— American journal of. *See* **American** journal.

——— Anatomischer Atlas zur pharmazeutischen Waarenkunde. *See* **Berg,** Otto.

——— Antheil der Pharmacie an der Entwicklung der Chemie. *See* **Buchner,** L. A., *jr.*

——— Chemische Schule der Pharmacie. *See* **Doebe einer,** Franz.

——— Drogen und Chemikalien. Frz. Wilhelm. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 9.**

——— The elaboratory laid open; or the secrets of chemistry and pharmacy revealed. *See* **Elaboratory.**

——— Introduction to practical. *See* **Parrish,** E.

——— Journal de pharmacie et chimie. *See* **Journal** de pharmacie.

——— Manuel de l'herboriste, etc. *See* **Julia de Fontenelle,** J. S. E., and **Tollard,** H. **43 Manuels Roret.**

——— Manuel de pharmacie. *See* **Julia de Fontenelle,** J. S. E. **3 Manuels Roret.**

——— Pharmaceutical manipulations, A manual of. *See* **Morfit,** C. and **C.**

——— Pharmaceutical processes and products. By J. Bell. *See* **Lectures** on the results of the exhibition.

——— Pharmacopœia Collegii regalis medicorum Londinensis. *See* LONDON. **Royal** college of physicians.

——— Practical. The arrangements, apparatus and manipulations of the pharmaceutical shop and laboratory. *See* **Mohr,** F., and **Redwood,** T.

——— Proceedings of the American pharmaceutical association, etc. *See* **American.**

——— Traité complet de pharmacie, théorique et pratique, contenant les éléments, l'analyse, et les formules, etc. *See* **Virey,** J. J.

——— A treatise on. *See* **Parrish,** Edward.

Digitized by Google

Phelps, Anson G., et al., adsm. the New England car spring company and Charles Goodyear. Motions by complainants for preliminary injunction. 8°. *Washington*, 1853. pp. 25.

PHILADELPHIA. Academy of natural sciences. Journal. v. 1-9, 1817-25. [Bound in 5 v.] 8°. *Philadelphia*, 1817-25.

——— American philosophical society for promoting useful knowledge. Proceedings. v. 1-10, 1838-40 to 1865-68, with 1 v. of laws, 1860. 8°. *Philadelphia*, 1838-69.

——— ——— Transactions. v. 1-6, 1786-1809. New series, v. 1-12, 1818-63. 4°. *Philadelphia*, 1786-1863.

——— and its manufactures. *See* **Freedley**, E. T.

——— board of trade, Annual report of. *See* **Blodget**, L.

——— College of pharmacy, American journal of. *See* **American**.

——— directories for 1853-67. *See* **McElroy**.

——— directories for 1868-76. *See* **Gopsill**.

——— Franklin institute. Journal. *See* **Franklin** institute.

——— ——— Report of the, in relation to the explosion of steam boilers. *See* UNITED STATES. **Treasury** department.

——— International exhibition, 1876. Berichte über die Weltausstellung in Philadelphia, 1876. Herausgegeben von der Oesterreichischen Commission. Heft 1-18——. *Illus.* 8°. *Wien*, 1877——.

Heft 1. Die landwirthschaftlichen Geräthe und Maschinen. Emil Perels. *Illus.*
2. Kurzwaaren-Industrie. Ed Kanitz. Hüte aus Filz und Seide. Carl Hückel.
3. Geodätische Instrumente. P. F. Kupka. *Illus.*
Mikroskope. Ernst Fleischl.
Medicin. Ernst Fleischl
4. Das Hüttenwesen mit besonderer Berücksichtigung des Eisenhüttenwesens in den Vereinigten Staaten. Franz Kupelwieser. *Illus.*
5. Wolle, Wollwaaren und bei deren Fabrikation verwendete Maschinen. Thdr. Bochner.
6. Holzbearbeitungs-Maschinen. Reifer. Holzindustrie. Thonet.
7. Chemische Industrie. Goldschmiedt.
8. Petroleum-Industrie Nordamerikas. Höfer.
9. Pharmaceutische und technische Drogen- und Chemikalien. Franz Wilhelm.
10. Dampfkessel. Radinger.

PHILADELPHIA—Continued.

11. Unterrichtswesen. Migerka.
12. Hilfsmaschinen und Werkzeuge für Eisen- und Metallbearbeitung. Franz Wencelides. *Illus.*
13. Das Eisenbahnwesen in den Vereinigten Staaten, mit besonderer Berücksichtigung des Oberbaues, der mechanischen Ausrüstung, der Wagen, dann des Verkehres in Städten. Ernest Pontzen. *Illus.*
14. Architektur und öffentliche Bauten. Anton Poschacher.
Malerei und Sculptur. Carl Costenoble.
15. Gesteins-Bohrmaschinen und Luftcompressions-Maschinen. A. Riedler. *Illus.*
16. Der Locomotivbau in den Vereinigten Staaten. Alois von Feyrer.
17. Heizung, Ventilation und Wasserleitungen. Leopold Strohmayer. *Illus.*
18. Leder-Industrie. Wilhelm Eisner.
19. Wagen, Dynamometer und Materialprüfungs-Maschinen. Johann Spacil. *Illus.*
20. Personen- und Laster-Aufzüge und Fördermaschinen. A. Riedler. *Illus.*
21. Pumpen und Feuerlöschapparate. F. Mannlicher. *Illus.*

——— International exhibition, 1876. Brazil at the exhibition. *See* BRAZIL.

——— ——— Briefe aus Philadelphia. *See* **Reuleaux**, F.

——— ——— The world's fair. *See* **Walker**, Francis A.

——— ——— United States centennial commission. Catalogues. *See* UNITED STATES.

——— ——— ——— Reports and awards. Edited by Francis A. Walker. In 35 groups. 8°. *Philadelphia*, 1877-78.

Group 1. Minerals, mining, and metallurgy, including machinery.
2. Pottery, porcelains, bricks, clays, cements and their materials. *Illus.*
3. Chemistry and pharmacy, including the apparatus.
4. Animal and vegetable products, with machinery for preparation.
5. Fish and fishing products, apparatus of fishing.
6. Timber, worked lumber, parts of buildings, forestry..
7. Furniture, upholstery, wooden-ware, baskets. 42 pp.
8. Cotton, linen, and other fabrics, including materials and machinery.
9. Wool and silk fabrics, including the materials and machinery.
10. Clothing, furs, India-rubber goods, ornaments and fancy articles.
11. Jewelry, watches, silver-ware, bronzes. 39 pp.
12. Leather and manufactures of leather, including boots, shoes, trunks, etc.

Digitized by Google

PHILADELPHIA—Continued.

13. Paper industry, stationery, printing and book-making.
14. Apparatus of heating, lighting, ventilation, water supply and drainage.
15. Builders' hardware, edge tools, cutlery.
16. Military and sporting arms, weapons, apparatus of hunting, explosives.
17. Carriages, vehicles and accessories. 48 pp.
18. Railway plant, rolling stock and apparatus, road engines. *Illus.*
19. Vessels and apparatus of transportation. 24 pp.
20. Motors, hydraulic and pneumatic apparatus.
21. Machine tools,—wood, metal and stone.
22. Machines, apparatus and implements used in sewing, making clothing, lace, ornamental objects, pins.
23. Agricultural machines, implements of agriculture, horticulture and gardening.
24. Instruments and apparatus of hygiene, medicine, surgery, prothesis. *Illus.*
25. Instruments of precision, research, experiment and illustration, including telegraphy and music. *Illus.*
26. Architecture and engineering.
27. Plastic and graphic art.
28. Education and science.
29. Horticulture.
30–35. Live stock.
36. Pomology.

* Collective exhibits. 48 pp.
** Tests of turbine water-wheels.
*** Test of steam boilers.
**** Trial of steam fire engines.

——— Library company. Catalogue of books belonging to the library; classified, with an index of authors. v. 1–3. [Prefaced to v. 1 is a short account of the institution, with the charter, laws and regulations. v. 3 contains the titles added from 1835 to 1856, with an index to the whole.] 8°. *Philadelphia*, 1835–56.

——— Loganian library. Catalogue of the books; to which is prefixed a short account of the institution, with the law for annexing the said library to that belonging to 'The library company of Philadelphia,' and the rules for conducting the same. Classified, with an index of authors. 8°. *Philadelphia*, 1837.

——— medical society. Final report of the committee on the construction of instruments, and their mode of action, in the radical cure of hernia, etc. *See* **Chase**, Heber.

——— (The) photographer. Ed. by E. L. Wilson. v. 1-13, 1864-77. 8°. *Philadelphia*, 1864-77———.

Philbrick, Edward S. Defects of house drainage, and their remedies. 8°. *Boston*, 1876.

Philipp, D. Alphabetisches Sachregister der wichtigsten technischen Journale. Jahrg. 1848-70. [Bound in 4 v.] 8°. *Berlin*, 1848-70.

PHILIPPINE islands, A visit to. *See* **Bowring**, John.

Phillips, Edward, *Gent.* The new world of words, or universal English dictionary; containing the original or proper sense, and various significations of all hard words derived from other languages; together with an explanation of all terms relating to arts, sciences and mechanics. fol. *London*, 1720.

Phillips, G. F. The art of drawing and painting simplified, in a series of examples of parts of the human figure. To which is added, the 'Art of flower painting.' 8°. *London*, 1840.

——— A practical treatise on drawing, and on painting in water colours. Illustrated in pencil, in sepia and in water colours. 8°. *London*, 1839.

——— Principles of effect and colour, as applicable to landscape painting. New ed. 4°. *London, n. d.*

Phillips, Henry. The companion for the kitchen garden; history of cultivated vegetables, comprising their botanical, medicinal, edible, and chemical qualities; natural history, etc. New ed. 2 v. 8°. *London*, 1831.

Phillips, John. Life on the earth, its origin and succession. 8°. *London*, 1860.

——— A treatise on geology. 2 v. New ed. 16°. *London*, 1852. **Lardner's cabinet cyclopædia, v. 124, 125.**

Phillips, John. Ophthalmic surgery and treatment; with advice on the use and abuse of spectacles. roy. 8°. *Chicago*, 1869.

Phillips, John Arthur. Elements of metallurgy; a practical treatise on the art of extracting metals from their ores. 8°. *London*, 1874.

——— A manual of metallurgy; or a practical treatise on the chemistry of the metals. *Illus.* 2d ed. 8°. *London*, 1854.

——— The mining and metallurgy of gold and silver. 8°. *London*, 1867.

Phillips, Samuel. Guide to the Crystal palace and park. 8°. *London*, 1854. **Crystal palace library, v. 3.**

Digitized by Google

Phillips, Samuel. The portrait gallery of the Crystal palace. 8°. London, 1854. **Crystal palace library, v. 3.**

Phillips, Willard. The inventor's guide; comprising rules, forms, and proceedings, for securing patent rights. 12°. *Boston*, 1837.

——— The law of patents for inventions; including the remedies and legal proceedings in relation to patent rights. 8°. *Boston*, 1837.

——— A treatise on the law of insurance. 2d ed. 2 v. 8°. *Boston*, 1840.

Philo, Works of. *See* **Veterum** mathematicorum.

PHILOLOGY. *See, also,* **Language.**

——— The elements of comparative. *See* **Latham,** R. G.

——— Ethnography and philology of the Hidatsa Indians. By W. Matthews. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. Misc. pubs., No. 7.**

——— Introduction to the study of Indian languages. *See* **Powell,** John W.

——— The student's handbook of comparative grammar. *See* **Clark,** Thomas.

PHILOSOPHER'S stone. *See* **Victorious** philosophical stone.

PHILOSOPHICAL experiments. *See* **Hooke,** Robert.

——— instruments. **Abridgments English Patents, No. 76.**

——— ——— Catalogue of. *See* Casella, L. P.

——— ——— Catalogue of. *See* Pike, Benjamin.

——— ——— and processes. By J. Glaisher. *See* **Lectures** on the results of the exhibition.

Philosophical (The) magazine, comprehending the various branches of science, the liberal and fine arts, agriculture, manufactures, and commerce. v. 1–68. [v. 1–59, ed. by Alexander Tilloch; 60–65, by A. Tilloch and Richard Taylor; 66–68, by R. Taylor.] 8°. *London*, 1798–1826.

——— magazine, The London and Edinburgh. *See* LONDON.

——— magazine, or annals of chemistry, mathematics, astronomy, natural history, and general science. Ed. by Richard Taylor and Richard Phillips. v. 1–11, 1827–32. 8°. *London*, 1827–32.

——— recreations, or winter amusements; a collection of entertaining and surprising

Philosophical recreations—Continued. experiments in mechanics, arithmetic, optics, hydrostatics, hydraulics, pneumatics, electricity, etc. 24°. *London*, 1823.

——— society of Glasgow. Proceedings for 1865–77. v. 6–10. 8°. *Glasgow*, 1868–77———. [Imperfect.]

PHILOSOPHY, A course of experimental. *See* **Desaguliers,** J. T.

——— Elements of experimental and natural. *See* **Hogg,** Jabez.

——— First lessons in. *See* **Cartée,** C. S.

——— First principles of a new system of. *See* **Spencer,** Herbert.

——— General principles of the philosophy of nature, with an outline of its recent developments among the Germans. *See* **Stallo,** J. B.

——— in sport, made science in earnest. Being an attempt to illustrate the first principles of natural philosophy by the aid of popular toys and sports. 3 v. [in 1]. 12°. *London*, 1827.

——— Intellectual elements of. *See* **Wayland,** Francis.

——— Mental. *See* **Upham,** Thomas C.

——— Natural; acoustics; optics. *See* **Bartlett,** W. H. C.

——— ——— The elements of. *See* **Cavallo,** Tiberius.

——— of the expansive and contractive forces, The principles of. *See* **Greene,** Robert.

——— of the sciences. *See* **Comte,** Auguste.

——— Philosophical and mathematical dictionary. *See* **Hutton,** Charles.

——— Philosophical experiments and observations. *See* **Hooke,** Robert.

——— Philosophical works of Robert Boyle. *See* **Boyle,** Robert.

——— A system of intellectual. *See* **Mahan,** Asa.

Philp, Robert Kemp. The history of progress in Great Britain. Commerce, manufactures, religious liberty, civil liberty. *Illus.* 8°. *London*, 1859–60.

Phipson, A. L. The sun. Transl. by. *See* **Guillemin,** Amédée. **Illus. library of wonders, v. 3.**

——— Thunder and lightning. Transl. by. *See* **Fonville,** W. de. **Illus. library of wonders, v. 6.**

Phipson, T. L. Meteors, aerolites and falling stars. 8°. *London*, 1867.

Digitized by Google

Phipson, T. L. Phosphorescence; or the emission of light by minerals, plants, and animals. 16°. *New York*, 1869.

PHONOGRAPHY. The complete phonographer. *See* **Munson,** James E.

—— Handbook of. *See* **Graham,** Andrew J.

—— The history of shorthand writing. *See* **Levy,** Mathias.

—— Phonetic magazine. *See* **Comstock,** Andrew.

—— Phonetic reader. *See* **Comstock,** Andrew.

—— Phonetic spelling book. *See* **Graham,** Andrew J.

—— Phonic manual; a national synthesis of the elements of the English language. *See* **Marrow,** S. L.

—— The phonographic reader. *See* **Andrews,** Stephen P., and **Boyle,** Augustus F.

—— —— Phonographic [illegible]; Nos. 1 and 2. *See* **Andrews, S. P., and Boyle,** A. F.

—— Practical. *See* **Jones,** J.

PHOSPHORESCENCE. *See* **Phipson,** T. L.

PHOSPHORUS disease. Feuerzeugfabrikation, mit besonderer Berücksichtigung der in den Phosphor-Zündholzfabriken vorkommenden Krankheiten. *See* **Wagner,** Heinrich. **289 Neuer Schauplatz dre Künste.**

—— Fabrikation des Phosphors. *See* **Rösling,** C. W. **86 Neuer Schauplatz der Künste.**

PHOTOGRAPHIC almanac, The American. *See* **American.**

—— (The) and fine art journal. Ed. by H. H. Snelling. 1st series, v. 1–6, 1851–53. 2d series, v. 1–6, 1854-57. 3d series, v. 1, 1860. 8° and 4°. *New York*, 1851–60.

—— apparatus, Catalogue of. *See* Anthony, E.

—— —— Catalogue of photographic cameras, lenses, etc. *See* Wood, E. G.

—— (The) art annual. *Illus.* 4°. *London*, 1859.

—— (The) art journal. v. 1. *Illus.* 4°. *London*, 1870.

—— bulletin, Anthony's. *See* **Anthony's.**

—— chemistry, A manual of; including the practice of the collodion process. *See* **Hardwich,** T. Fredrick.

PHOTOGRAPHIC instruments, A catalogue of philosophical, meteorological, mathematical, optical, and. *See* Casella, L. P.

—— (The) news. A weekly record of the progress of photography. Ed. by William Crookes and G. W. Simpson. v. 1–20. 1858–76. l. 8°. *London*, 1858–76——.

—— (The) news almanac; or the yearbook of photography. For 1861, 1867, 1869, 1871–1876. [1869 is entitled 'The yearbook of photography, and photographic news almanac'.] 16°. *London*, 1861–76——.

—— notes. Ed. by Thomas Sutton. v. 1–12, 1856–67. [v. 1 is entitled 'Photographic notes; journal of the Photographic society of Scotland and of the Manchester society'; v. 2–12, 'Photographic notes; journal of the Birmingham photographic society'.] 8°. *London*, 1856–67.

—— (The) times. v. 1–6, 1871–76. 8°. *New York*, 1871–76——.

—— (The) world. *See* **Wilson,** Edward L.

Photographie (La) simplifiée sans cabinet noir, ni tente de voyage à l'aide du laboratoire révélateur Titus Albités. 8°. *Paris*, 1862. pp. 14.

Photographische Mittheilungen. Organ des Photographischen Vereins zu Berlin. Hrsg. von Hermann Vogel. Jahrg. 1–13, 1864–77. [Later vols. entitled also 'Zeitschrift des Vereins zur Förderung der Photographie'.] 4° and 8°. *Berlin*, 1864-77——.

—— Monatshefte. Hrsg. und redigirt von F. Bollmann. B. 1–2. 8°. *Braunschweig*, 1862-63.

Photographischer Almanach für 1861. *Berlin*, 1860.

Photographisches Journal. Magazin praktischer Erfahrungen, Fortschritte, Notizen, und Neuigkeiten aus dem Gebiete der Photographie. Redigirt und hrsg. von Wilhelm Horn. B. 1–22, 1854–64. sm. 4°. *Leipzig*, 1854–64.

PHOTOGRAPHY. Abridgments English Patents, No. 19.

—— Agenda für den Photographen. *See* **Krüger,** J., and **Spamer,** O.

—— The American carbon manual, or the production of photographic prints in permanent pigments. *See* **Wilson,** Edward L.

Digitized by Google

PHOTOGRAPHY, American journal of. *See* **American.**

——— The American photographic almanac. *See* **Towler**, John.

——— Anleitung zur Photographie. *See* **Sternberg**, C.

——— Annuaire de photographie: résumé des procédés les meilleurs pour la plaque métallique, le papier sec et humide. *See* **Delestre**, J. B.

——— Der Apparat des Photographen. *See* **Krüger**, J.

——— Appareils optiques pour l'astronomie et pour la photographie. *See* **Porro**, I.

——— L'art du photographe; comprenant les procédés complets sur papier et sur glace négatifs et positifs. *See* **La Blanchère**, H. de.

——— Art of, with hints on the locale best suited for photographic operations. *See* **Halleur**, G. C. H. **Weale's series, No. 79*.** [?]

——— Artistic colouring as applied to. *See* **Wall**, A. H.

——— Bibliotheca photographica. *See* **Zuchold**, E. A.

——— British journal of. *See* **British** journal.

——— British journal photographic almanac. *See* **British** journal.

——— Bulletin de la Société française de photographie. *See* PARIS. **La** Société française.

——— The camera and the pencil. *See* **Root**, M. A.

——— Catalogue des appareils photographiques. *See* **Chevalier**, C.

——— Catechism of. *See* **Catechism.**

——— Chimie photographique. *See* **Barreswil**, C. L., and **Davanne.**

——— Code de l'opérateur photographique. *See* **Belloc**, A.

——— Collection du journal 'La lumière'; revue de la photographie. *See* **Collection.**

——— Collodio-albumen process, hints on composition, and other papers. *See* **Mudd**, James.

——— The collodion process. *See* **Hennah**, T. H.

——— The collodion process on glass. *See* **Archer**, F. S.

——— Collodion processes, wet and dry. *See* **Sutton**, T.

——— Collodion sec; exposé de tous les procédés connus. *See* **Perrot de Chaumeux**, L.

PHOTOGRAPHY, Compendium of, containing simple and concise directions for the albumenized, waxed paper, and dry collodion processes, etc. *See* **Cox**, F.

——— A description of certain instantaneous dry collodion processes, etc. *See* **Sutton**, Thomas.

——— A description of the manipulations and apparatus necessary to produce landscape pictures, geological sections, etc., by the calotype, etc. *See* **Otté**, J.

——— Dictionary of. *See* **Snelling**, H. H.

——— Dictionary of. *See* **Sutton**, T.

——— Directions for obtaining photographic pictures, etc. *See* **Croucher**, J. H., and **Le Gray**, G.

——— The dry collodion process. *See* **Barnes**, R. F.

——— The dry collodion process. *See* **Long**, C. A.

——— Dry plate photography; or the tannin process made simple and practical. *See* **Towler**, John.

——— Emploi des papiers du commerce en photographie. *See* **Geoffray**, S.

——— Erfahrungen in practischer Photographie. *See* **Le Grice**, R.

——— Glimpses at. *See* **Himes**, Charles F.

——— Guide to; including recent improvements in the calotype, daguerreotype, collodion albumen and waxed paper processes, etc. *See* **Thornthwaite**, W. H.

——— Handbuch der Emailphotographie und der Phototypie. *See* **Martin**, A. **279 Neuer Schauplatz der Künste.**

——— Handbuch der gesammten Photographie. *See* **Martin**, A.

——— Handbuch der Photographie. *See* **Bollmann**, Fr.

——— Handbuch der Photographie. *See* **Kleffel**, L. G.

——— Handbuch der Photographie auf Metallplatten, Papier und Glas. *See* **Schmidt**, C. H. **199, 218 Neuer Schauplatz der Künste.**

——— Handbuch der Photographie auf Collodion. *See* **Leisegang** P. E.

——— Hints on photography; its chemistry and manipulations. *See* **Hockin**, J. B.

——— History and practice of the art of *See* **Snelling**, H. H.

——— How to paint photographs. *See* **Ayres**, George B.

——— Humphrey's journal of the daguerreotype and photographic arts. *See* **Humphrey's** journal.

Digitized by Google

PHOTOGRAPHY in printing ink. *See* **Sutton**, Thomas.
—— Instantaneous photographic process. *See* **Wenderoth**, F. A.
—— Instructions in. *See* **Bingham**, R. J.
—— Instructions in. *See* **Fisher**, G. T., *jr.*
—— Jahresbericht über die Fortschritte und Leistungen im Gebiete der Fotografie. *See* **Kreutzer**, K. J.
—— Journal of the Photographic society of London. *See* LONDON. **Photographic society.**
—— Kompendium der Fotografie. *See* **Marneau**, R.
—— Die Kunst der Photographie. *See* **Halleur**, G. C. H.
—— Lookout landscape. *See* **Linn**, R. M.
—— The magic photograph; with directions and formulas for making it. *See* **Towler**, John.
—— Making porcelain pictures. *See* **Reynolds**, George L.
—— Manual of. *See* **Hunt**, R.
—— Manual of; a text-book for beginners, and a book of reference for advanced photographers. *See* **Lea**, M. Carey.
—— Manual of, adapted to amateur practice. *See* **Coale**, G. B.
—— Manual of artistic coloring as applied to photographs. *See* **Wall**, A. H.
—— Manual of photographic chemistry, including the collodion process. *See* **Hardwich**, T. F.
—— Manual of photographic manipulations. *See* **Price**, L.
—— Manual of science and arts, and photographic miscellany. *See* **Manual of science.**
—— Manuel de photographie sur collodion et sur albumine. *See* **Robiquet**, E.
—— Manuel de photographie sur collodion instantanée. *See* **Disdéri.**
—— Manuel de photographie sur métal, sur papier et sur verre. *See* **Valicourt**, E. de. **125 Manuels Roret.**
—— La méthode des portraits grandeur naturelle. *See* **Chevalier**, A.
—— Méthodes photographiques perfectionnées. *See* **Chevalier**, C.
—— Moniteur de la photographie; revue universelle des progrès de la photographie. *See* **Moniteur.**
—— The negative and the print; or the photographer's guide. *See* **Towler**, John.

PHOTOGRAPHY. Negative processes on waxed and plain papers, and on glass. *See* **Burnett**, C. J.
—— Neue Resultate und Consequenzen für die Praxis der Photographie. *See* **Lemling**, Joseph.
—— Das Neueste auf dem Gebiete der Photographie. *See* **Kleffel**, L. G.
—— Neueste Entdeckungen auf dem Gesammtgebiete der practischen Photographie. *See* **Lemling**, Joseph.
—— Notes sur la photographie sur plaques métalliques. *See* **Gros**, J. B. L.
—— on glass and paper. *See* **Ellis**, M. H.
—— on glass and paper. *See* **Long**, C. A.
—— The oxymel process in. *See* **Delamotte**, P. H.
—— Painting photographic portraits, draperies, backgrounds, etc., in water colors. *See* **Rintoul**, A. N.
—— Peinture appliquée à la photographie de portraits. *See* **David**, H.
—— Phénomènes de photographie dans le procédé du daguerréotype. *See* **Claudet**, A.
—— Philadelphia photographer. *See* **Philadelphia.**
—— Photograph and ambrotype manual. *See* **Burgess**, N. G.
—— Photographs of the United States geological survey of the territories. *See* UNITED STATES. **Interior dept. Geolog. survey. F. V. Hayden. Misc. pubs., No. 5.**
—— The photographer's pocket companion; a treatise on the collodion process, negative and positive. *See* **Davie**, D. D. T.
—— The photographer's reference table. *See* **Bensa**, L. G.
—— Photographic art. By M. Sparling. *See* **Gore**, G., and others. **Orr's circle of the sciences, v. 7.**
—— Photographic art; its theory and practice; including its chemistry and optics. *See* **Martin**, James.
—— Photographic charcoal printing. *See* **Leisegang**, Paul E.
—— Photographic difficulties; how to surmount them. Instantaneous pictures; how to obtain them. *See* **Ponting**, T. Cadbig.
—— Photographic lexicon. *See* **Schauss**, J.
—— Photographic mosaics. *See* **Wilson**, Edward L.

Digitized by Google

PHOTOGRAPHY. Photographic mosaics; an annual record of photographic progress. *See* **Lea**, M. Carey.

—— Photographic primer. *See* **Cundall**, J.

—— Photographic scrap book. *See* **White**, Franklin.

—— Photographic views at home and abroad. *See* **Langenheim**, F.

—— Photographie als Hülfsmittel mikroskopischer Forschung. *See* **Gerlach**, J.

—— Photographie auf der Londoner Weltausstellung 1862. *See* **Vogel**, H.

—— Photographie auf Stahl, Kupfer und Stein. *See* **Kessler**, G.

—— Photographie; chromatographie; photochimie. *See* **Béron**, P.

—— Photographie in einer Nuss. *See* **Laurent**, A.

—— Photographie-ivoire, ou l'art de faire des miniatures rendu aussi facile que le coloris sur plaque, sans savoir ni peindre, ni dessiner. *See* **Pinot**, E.

—— Photographie, par P. Burty. *See* **Lagrange**, L. La peinture au salon de 1861.

—— Photographie rationnelle; applications diverses. *See* **Belloc**, A.

—— Photographie sur papier sec, etc. *See* **Chevalier**, C.

—— Photographie sur verre. Notice sur l'emploi du collodion rapide. *See* **Bertsch**, A.

—— Photographie, von Josef Löwy. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

—— Photographikon. Hülfsbuch auf Grund der neuesten Entdeckungen und Erfahrungen in allen Zweigen der photographischen Praxis. *See* **Heinlein**, H.

—— Photographing histological preparations. *See* UNITED STATES. **War** department. Surgeon general's office.

—— Photographisch-chemikalisches Lexikon. *See* **Bollmann**, F.

—— Photographische Mittheilungen. *See* **Photographische.**

—— Photographische Optik. Beschreibung der photographischen Objective und der Vergrösserungs-Apparate. *See* **Monckhoven**, D. van.

—— Photographische Fortschritte der neuesten Zeit. *See* **Lemling**, Joseph.

—— Photographisches Memorial, etc. *See* **Buehler**, Otto.

—— Photographs in pigments; containing historical notes on carbon painting, etc. *See* **Simpson**, G. Wharton.

PHOTOGRAPHY. Die Photoverrotypie. *See* **Lemling**, Joseph.

—— The positive collodion process. *See* **Sutton**, T.

—— Positive proofs from waxed paper, etc. *See* **How**, J.

—— Practice of. *See* **Delamotte**, P. H.

—— Der praktische Fotograf. *See* **Weingartshofer**, M.

—— Der praktische Photograph. *See* **Lemling**, J.

—— Principles and practice of. *See* **Hughes**, C. J.

—— Printing photographic pictures on paper. *See* **Howlett**, R.

—— Printing positive photographs. *See* **Sutton**, T.

—— Procédé de photographie sur plaques de fer. *See* **Monckhoven**, D. van.

—— Prospectus of the establishment for permanent photographic printing. *See* **Sutton**, T., and **Blanquart**, Evrard.

—— Prüfung photographischer Chemikalien. *See* **Barrlay**, C. J.

—— Les quatres branches de la photographie. *See* **Belloc**, A.

—— Recept-Taschenbuch für Photographen. *See* **Bollmann**, Fr.

—— Recherches photographiques. Photographie sur verre; notes et procédés divers. *See* **Niepce de Saint-Victor**, C. M. F.

—— The reducer's manual and gold and silver worker's guide. *See* **Bloede**, Victor G.

—— Renseignements photographiques. *See* **Disdéri.**

—— Répertoire de photographie. *See* **La Blanchère**, H. de.

—— Répertoire de photographie. *See* **Latreille**, É. de.

—— Répertoire général de photographie. *See* **Monckhoven**, D. van.

—— Repertorium der gesammten Photographie. *See* **Martin**, A.

—— Report on. By C. A Doremus. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

—— Report on. By H. F. G. D'Aligny. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

—— Revue photographique; consacrée aux progrès de la photographie. *See* **Revue** photographique.

—— The silver sunbeam; a text-book on photographic printing. *See* **Towler**, John.

Digitized by Google

PHOTOGRAPHY. The sky light and the dark room; a complete text-book of portrait photography. *See* **Anderson,** Elbert.

—— Le soleil de laphotographie. Traité complet de. *See* **Legros,** —.

—— System of; an explicit detail of the whole process of daguerreotype. *See* **Humphrey,** S D.

—— The tannin process. *See* **Russell,** C.

—— Theoretical and practical. *See* **Gage,** F. B.

—— Traité de l'impression photographique sans sels d'argent. *See* **Poitevin,** A.

—— Traité de photographie. *See* **La Sor,** *Cte.* de, and **Texier.**

—— Traité de photographie. *See* **Monckhoven,** D. van.

—— Traité de photographie élémentaire sur collodion. *See* **Robert,** G.

—— Traité de photographie microscopique. *See* **Dagron.**

—— Traité de photographie sur papier. *See* **Blanquart-Evrard,** M.

—— Traité des procédés et manipulations sur papier sec, humide, et sur verre au collodion, à l'albumine, etc. *See* **Le Gray,** G.

—— Trask's ferrotyper. *See* **Trask,** A. K. P.

—— Treatise of photography on collodion. *See* **Waldack,** C., and **Neff,** P., *jr.*

—— Treatise on. *See* **Lerebours,** N. P.

—— Treatise on. *See* **Monckhoven,** D. van. **Weale's series, No. 79**.**

—— Treatise on. *See* **Waldeck,** C.

—— Das Trocken-Verfahren der Gegenwart. *See* **Schnauss,** J.

—— Vademecum des Photographen. *See* **Krüger,** J.

—— Waxed paper process in. *See* **Crookes,** W.

—— The waxed paper process. *See* **Le Gray,** G.

—— Zeitschrift für Fotografie und Stereoskopie. *See* **Zeitschrift.**

PHOTO-lithography, New process of. *See* **Osborne,** John Walter.

PHOTO-micrography, The oxy-calcium light applied to. *See* UNITED STATES. **War** dept. Surgeon general's office.

—— —— Photomicrographie pratique. *See* **Girard,** Jules.

Photo-miniatures; or, painting on porcelain, with diretions for printing the picture from the negative. 24°. *Philadelphia,* 1867. pp. 31.

PHOTO-zincography and other photographic processes. *See* **Scott,** A. De C.

—— —— Domes-day book; Cornwall; photo-zincographed. *See* GREAT BRITAIN.

PHOTOMETER erfunden und begründet. *See* **Pietschmann,** W.

PHRENO-geology; the progressive creation of man. *See* **Grimes,** J. Stanley.

PHYSIC, The principles and practice of. *See* **Watson,** Thomas.

PHYSICAL apparatus, Report on. By W. Gibbs. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

—— basis of life. *See* **Huxley,** T. H. **University series, No. 1.**

—— basis of life, Protoplasm in relation to. *See* **Stirling,** James H. **University series, No. 3.**

—— diagnosis, Lessons in. *See* **Loomis,** Alfred L.

—— forces, Applications of. *See* **Guillemin,** Amédée.

—— —— The correlation of. *See* **Grove,** W. R.

—— —— The correlation of vital and *See* **Barker,** George F. **University series, No. 2.**

—— geography. *See* **Somerville,** Mary.

—— —— *See* **Young,** John.

—— —— of the sea. *See* **Maury,** M. F.

—— —— of the United States. By C. Ellet. **Smiths'n contrib., v. 9.**

—— —— Outlines of. *See* **Day,** John Q.

—— —— Outlines of. *See* **Fitch,** George W.

—— —— The physical atlas. *See* **Johnston,** A. K.

—— —— Treatise on. By H. J. Loyd. *See* LONDON. **Society of useful knowledge, v. 3.**

—— investigation, Methods and tendencies of. *See* **Tyndall,** John. Scientific addresses. **University series, No. 5.**

—— measurements; with appendices on absolute electrical measurement. *See* **Kohlrausch,** F.

—— science, Lectures on recent advances in. *See* **Tait,** P. G.

—— sciences, On the connection of. *See* **Somerville,** Mary.

—— —— The unity of the. *See* **Dickson,** J.

PHYSICIAN and patient. *See* **Hooker,** Worthington.

Digitized by Google

PHYSICIAN, The English. *See* **Culpeper**, Nich.
——— The new family. *See* **Gunn**, John C.
——— The southern family. *See* **Nash**, John Addison.
PHYSICS and meteorology. *See* **Miller**, J.
——— and politics. *See* **Bagehot**, Walter. **International scientific series, v. 2.**
——— Annalen der Physik. *See* **Annalen.**
——— Annalen der Physik und Chemie. *See* **Poggendorff**, J. C.
——— Annual report of the progress of. *See* **Liebig**, J. v., and **Kopp**, H.
——— L'art des expériences, ou avis aux amateurs de la physique sur le choix, la construction et l'usage des instruments, sur la préparation et l'emploi des drogues, etc. *See* **Nollet**, J. A.
——— Correlation and conservation of forces, etc. *See* **Grove**, William Robert.
——— Correlation of physical forces. *See* **Grove**, W. R.
——— Cours de physique de l'École polytechnique. *See* **Jamin**, M. J.
——— Cours de physique, purement expérimentale et sans mathématiques. *See* **Ganot**, A.
——— Cyclopædia of the physical sciences. *See* **Nichol**, J. P.
——— Elementary course of. *See* **Rolfe**, W. J., and **Gillet**, J. A.
——— Elements of. *See* **Arnott**, N.
——— Elements of. *See* **Peschel**, C. F.
——— Elements of chemical physics. *See* **Cook**, Josiah P.
——— Fortschritte der Physik. *See* BERLIN **Physikalische** Gesellschaft.
——— Introduction to experimental; including directions for constructing physical apparatus, and for making experiments. *See* **Weinhold**, Adolf F.
——— Jahresbericht des physikalischen Vereins. *See* FRANKFORT.
——— Jahresbericht über die Fortschritte der Physik. *See* **Liebig**, J. v., and **Kopp**, H.
——— Jahresbericht über die Fortschritte der Physik. *See* **Zamminer**, F.
——— Journal der Physik. *See* **Journal.**
——— Lecture notes on. *See* **Mayer**, Alfred M.
——— Lehrbuch der Physik. *See* **Pouillet**, C. S. M.
——— Lehrbuch der Physik. *See* **Stammer**, K.
——— Lehrbuch der technischen Physik. *See* **Hessler**, J. F., and **Pisko**, F. J.
PHYSICS. Manuel de physique. *See* **Bailly**, C. **5 Manuels Roret.**
——— Manuel de physique amusante. *See* **Julia de Fontenelle**, J. S. E. **27 Manuels Roret.**
——— Petit traité de physique. *See* **Jamin**, M. J.
——— The philosophy of; or process of creative development. *See* **Brown**, Andrew.
——— Physick refined. *See* **Van Helmont**, John Baptista.
——— Physical technics. *See* **Frick**, J.
——— Physico-mechanical experiments on various subjects; containing an account of surprising phenomena touching light and electricity, producible by the attrition of bodies. *See* **Hauksbee**, F.
——— Physikalische Technik. *See* **Frick**, J.
——— Physiologia experimentalis. *See* **Kircher**, A.
——— Positions de physique. *See* **Quetelet**, A.
——— Repertorium der Physik. *See* **Dove**, Heinrich Wilhelm, and **Moser**, L.
——— Schriften der königlichen physikalisch-ökonomischen Gesellschaft. *See* KÖNIGSBERG.
——— Smithsonian miscellaneous collections. *See* **Smithsonian** institution.
——— Théorie mathématique de l'élasticité des corps solides. *See* **Lamé**, M. G.
——— Tracts, mathematical and physical. *See* **Brougham**, Henry.
——— Traité élémentaire de physique. *See* **Daguin**, P. A.
——— Traité élémentaire de physique. *See* **Ganot**, A.
——— Traité de physique. *See* **Forthomme**, C.
——— Traité de physique. *See* **Péclet**, J. E. C.
——— Traité de physique élémentaire. *See* **Drion**, Chs., and **Fernet**, É.
——— Traitez de physique et d'histoire naturelle. *See* **Deslandes.**
——— Treatise on. *See* **Ganot**, A.
——— Ueber die Physik der Molecularkräfte. *See* **Jolly**, P.
——— Verzeichniss physikalischer Instrumente, u. s. w. *See* **Oechsle**, C. L.
——— Wirkungen aus der Ferne. *See* **Dove**, Heinrich Wilhelm.
PHYSIOGNOMY. Lehre vom Mienenspiel. *See* **Harless**, E.
——— Outlines of a new system of. *See* **Redfield**, J. W.

Digitized by Google

Physiologie du goût; ou méditations de gastronomie transcendante; ouvrage théorique, historique et à l'ordre du jour. Dédié aux gastronomes parisiens, par un professeur. Nouv. éd. 12°. *Paris*, 1839.

PHYSIOLOGY and calisthenics. *See* **Beecher**, Catharine E.

—— and laws of health. *See* **Jarvis**, Edward.

—— and pathology of the mind. *See* **Maudsley**, Henry.

—— Animal. *See* **Smith**, T. S.

—— Arterien der Verdauungswerkzeuge der Saurier. *See* **Rathke**, H.

—— elementary, Four lectures on, by J. E. Morgan. *See* **Science lectures for the people, series 1**.

—— Grenzen und Grenzgebiete der physiologischen Forschung. *See* **Harless**, E.

—— Human, for the use of elementary schools. *See* **Lee**, Charles A.

—— Leçons sur les phénomènes phys ques des corps vivants. *See* **Matteucci**, C.

—— Liebig's question to Mulder tested. *See* **Mulder**, G. T.

—— Manual of. *See* **Kirkes**, William Senhouse.

—— Muskel- und Nervenphysik. *See* **Du Bois-Reymond**, Emil.

—— of man. *See* **Flint**, Austin, *jr.*

—— of the senses; or how and what we see, hear, taste, feel, and smell. *See* **Johnson**, A. B.

—— On wakefulness. *See* **Hammond**, William A.

—— Outlines of human and comparative. *See* **Marshall**, John.

—— Physiological memoirs. *See* **Hammond**, William A.

—— Principles of human; with their applications to psychology, pathology, therapeutics, hygiene, and forensic medicine. *See* **Carpenter**, William B.

—— Principles of; the structure of the skeleton and of the teeth; and of the varieties of the human ra e. *See* **Bushnan**, J. S., and others. **Orr's circle of the sciences, v. 1.**

—— Sleep, and its derangements. *See* **Hammond**, William A.

PHYTOLACCA decandra, Dissertation on the. *See* **Shultz**, Benjamin.

PIANOS. Abhandlung über Klavier-Saiten-Instrumente. *See* **Thon**, C. F. G. **89 Neuer Schauplatz der Künste.**

PIANOS. Art of playing the pianoforte. *See* **Spencer**, C. C. **Weale's series, No. 71.**

—— Der Clavierbau in seiner Theorie, Technik und Geschichte. *See* **Welcker von Guntershausen, H.**

—— Der Flügel oder die Beschaffenheit des Pianos in allen Formen. *See* **Welcker von Gountershausen**, H.

—— Geschichte des Clavierbaues. *See* **Fischhof**, J.

—— Hints to pianoforte players. *See* **Winkler**, J. A. E.

—— Instructions pour le déballage, l'entretien et la conservation des pianos. *See* Pleyel, J., and co.

—— Die Kunst des Clavierstimmens. *See* **Armellino**, G. **21* Neuer Schauplatz der Künste.**

—— Lehrbuch des Pianofo.tebaues. *See* **Blüthner**, Julius, and **Gretschel**, Heinrich.

—— Manuel de l'accordeur ou l'art d'accorder le piano. *See* **Roma**, G. di. **25 Manuels Roret.**

—— Manufacture of S. B. Drigg's square and grand. *See* Wallace piano-forte co.

—— The piano forte: its origin, progress and construction; with an account of instruments of the same class which preceded it, viz. clavichord, virginal, spinet, harpsichord, etc. *See* **Rimbault**, Edward F.

PICARDY. La Société des antiquaires de Picardie, Statuts et règlement de. *See* AMIENS.

—— —— Mémoires de. *See* AMIENS.

Pichler, Adolf. Geognosie Tirols. Ferdinandeum. *See* TYROL.

Pick, S. Die Alkalien. Ein Handbuch für Färber, Bleicher, Seifensieder, Fabrikanten v n Glas. Darstellung der Fabrikation der gebräuchlichsten Kali- und Natron-Verbindungen, der Soda, Potasche, des Sa'zes, Salpeters, Glaubersalz s, Wasserglases, Chromkalis, Blutlaugensalzes, Weinsteins, Laugensteins, u. s. f., deren Anwendung und Prüfung. *Illus.* sm. 8°. *Wien, Pest, Leipzig*, 1877.

Pickering, Charles. The races of men, and their geographical distribution; constituting v. 9 of the report of the United States exploring expedition, during the years 1838–1842, under the command of Charles Wilkes. 4°. *Boston and London*, 1848.

Digitized by Google

Pickett, William Vose. Useful metals and their alloys, by. *See* **Scoffern, J.,** and others.

Pictorial effect of photography. *See* **Robinson,** H. P.

——— gallery of arts; useful arts. 4°. *London,* [1846?]

PICTURE writing. Iconographie de la faïence. *See* **Mareschal,** M. A. A.

Pierce, Benjamin, **Henry,** Joseph, and **Bache,** A. D. Defence of Dr. Gould. *See* **Henry,** J.

Pierer, Heinrich August. Universal-Lexikon der Vergangenheit und Gegenwart; oder neuestes encyclopädisches Wörterbuch der Wissenschaften, Künste und Gewerbe. B. 1-19. 4te Aufl. 8°. *Altenburg,* 1857-65.

Pierre, J. T. Chimie agricole, ou l'agriculture considérée dans ses rapports principaux avec la chimie. 2e éd. 12°. *Paris,* 1859.

Pietschmann, W. Der Photometer (Lichtmesser) erfunden und durch natürliche Beweismittel wissenschaftlich und praktisch begründet; sowie auch die bisher bestandenen Hypotheseu ueber Entstehung der Farben durch Licht durch diesen Apparat überwunden und die hiermit aufgestellten Thesen hinreichend bewiesen. *Illus. Leipzig, n. d.* pp. 40.

Piette, Louis. Essais sur la coloration des pâtes à papier et sur la fabrication directe de papiers de teinture d'après un nouveau procédé, avec 350 échantillons; précédés d'un aperçu sur l'état actuel de la fabrication du papier, et suivis de notions sur l'assortiment des couleurs. *Illus.* 8°. *Paris,* 1853.

——— Die Fabrikation des Papiers aus Stroh und vielen andern Substanzen im Grossen nach zahlreichen Versuchen beschrieben, und mit 160 Mustern von verschiedenen Papiersorten bewiesen, nebst einer Beschreibung der neuesten Erfindungen in der Papierfabrikation. 8°. *Cöln,* 1838; also, ed. *Cöln, Dresden, Paris,* 1861.

——— Journal des fabricants de papier; publ. par. *See* **Journal.**

PIG iron. Hohofen zur Darstellung von Roheisen. *See* **Schinz.**

——— ——— Das Roheisen in Bezug auf seine Verwendung zur Eisengiesserei. *See* **Ledebur,** A.

PIG iron. Über die Constitution des Roheisens und den Werth seiner physikalischen Eigenschaften, etc. *See* **Dürre,** Ernst F.

PIGEONS, domestic, A treatise on. *See* **Treatise.**

——— The new and complete pigeon-fancier. *See* **Girton,** Daniel.

——— their structure, varieties, habits, and management. *See* **Tegetmeier,** W. B.

Piggot, A. Snowdon. American journal of dental science; ed. by. *See* **American.**

——— Chemistry and metallurgy as applied to the study and practice of dental surgery. *Illus.* 8°. *Philadelphia,* 1854.

——— Chemistry and metallurgy of copper; including a description of the principal copper mines of the United States and other countries, the art of mining and preparing ores for market, and the various processes of copper smelting, etc. *Illus.* 12°. *Philadelphia,* 1858.

Pilli, C. Ueber unnachahmliche Werthpapiere. 8°. *Braunschweig,* 1850. pp. 29.

Pike, Benjamin. Illustrated, descriptive catalogue of optical, mathematical and philosophical instruments, manufactured, imported and sold by the author. 750 engravings, mostly original designs from the instruments, in the various departments of electricity, galvanism, magnetism, electro-magnetism, pneumatics, hydrostatics, mechanics, optics, astronomy, surveying, navigation, meteorology, chemistry, etc. 2 v. 2d ed. 12°. *New York,* 1856.

PILOT, The American coast. *See* **Blunt,** Edmund M.

——— for the lakes. *See* **Barnet,** J.

Pilzecher, Carl. Die Hutmacherkunst nach allen ihren praktischen Verrichtungen. *Illus.* 8°. *Ilmenau,* 1828. **38 Neuer Schauplatz der Künste.**

Pineda, Peter. A new dictionary, Spanish-English, English-Spanish; containing the signification of words, terms of art, names of men, families and plants, together with the Arabick and Moorish words now used in the Spanish tongue. fol. *London,* 1740.

PINES. A description of the genus pinus. *See* **Lambert,** Aylmer Bourke.

——— The Isle of. *See* **Van Sloetten** Henry Cornelius.

Digitized by Google

PINES. The pinetum. *See* **Gordon,** George.

PINKS. Monographie du genre œillet. *See* **Ponsort,** Le Bon de.

Pinnock's ciphering book, No. 3. New ed. sm. 4°. *London, n. d.*

Pinot, Ele. Photographie-ivoire, ou l'art de faire des miniatures, rendu aussi facile que le coloris sur plaque sans savior ni peindre ni dessiner; précédée d'un traité complet de photographie, contenant les procédés nouveaux pour faire des fonds de paysages, les ciels, etc. 8°. *Paris,* 1857.

PINS. Abridgments English Patents, No. 45.

——— *See* PHILADELPHIA. **Internat. Exhib. 1876, Group 22.**

——— Art de l'épinglier, par R. A. F. de Réaumur, des additions, par Duhamel du Monceau; et des remarques de Perronet. PARIS. **Acad. roy. des. sc.; arts et métiers, v. 8 and 7.**

——— used in bridges, Proportions of. *See* **Bender,** Charles. **Van Nostrand's science series, No. 4.**

Pintus, J. Die landwirthschaftlichen Maschinen- und Ackergeräthe auf der Industrie-Ausstellung aller Nationen zu London, 1862. Mit Berücksichtigung der neuesten Erscheinungen auf diesem Gebiete. *Illus.* 4°. *Berlin,* 1864.

Pinzger, L. Die geometrische Construction von Weichenanlagen für Eisenbahn-Gleise. 8°. *Aachen,* 1873.

Piobert, —, **Combes,** Charles, and **Couche,** Charles. Rapport sur le frein automoteur de M. Guérin, par une commission composée de. [Extrait des Annales des ponts et chaussées, T. 13.] 8°. *Paris,* 1857. pp. 32.

Piobert, Guillaume. Traité d'artillerie théorique et pratique. Précis de la partie élémentaire et pratique. 2e éd. 8°. *Paris,* 1845.

Piola, Gabrio. Sull'applicazione de' principj della Meccanica analitica del Lagrange ai principali problemi. Memoria di. 4°. *Milano,* 1825.

Piozzi, Hester Lynch. British synonymy; or an attempt at regulating the choice of words in familiar conversation. 8°. *Dublin,* 1794.

Piron, F. P. J. Vorschläge zu gepanzerten Drehkuppeln und transportablen Panzerbatterien, sowie zu einer artilleristischen

Piron, F. P. J.—Continued.

Anordnung für die Eisenthürme im Allgemeinen von. Deutsch bearbeitet von Ig. Körbling. *Illus.* 8°. *Braunschweig,* 1863. pp. 41.

Pirrie, William. The principles and practice of surgery; ed. with additions. By John Neill. 8°. *Philadelphia,* 1852.

PISCICULTURE. *See* **Fish** culture *and* **Fish** breeding.

Pisko, Fr. Jos. Die neueren Apparate der Akustik für Freunde der Naturwissenschaft und der Tonkunst. 8°. *Wien,* 1865.

Pitkin, Timothy. A statistical view of the commerce of the United States: its connection with agriculture and manufactures: and an account of the public debt, revenues and expenditures. With a brief review of the trade, agriculture and manufactures of the colonies previous to their independence; accompanied with tables illustrative of the principles and objects of the work. 2d ed. 8°. *New York,* 1817.

Pitman, Robert Birks. A succinct view and analysis of authentic information extant—on the practicability of joining the Atlantic and Pacific oceans by a ship canal across the isthmus. 8°. *London,* 1825.

Pitre, —, *Chevalier.* Littérature et beaux-arts. *See* **Écho** de la littérature.

Pittard, Charles. Cutting board or table, by. *See* **Kipping,** R. Sails and sailmaking. **Weale's series, No. 149.**

PLAGUE (The). [Various tracts on the prevention and management of; some of them in old English.] sm. 4°. *London,* 1625-41.

PLAIN scale, Description of the. *See* **Description.**

PLAITING. Abridgments English Patents, No. 29.

Planche, Gabriel. Die Papierfabrication, wie sie nach ihrem dermaligen Standpunct in England, Frankreich, Deutschland, Holland, Belgien und der Schweiz betrieben wird. Mit Beziehung anderer neuester Materialien, deutsch bearbeitet von Carl Hartmann. *Illus.* 8°. *Weimar,* 1854. **205 Neuer Schauplatz der Künste.**

Planché, J. R. History of British costume, from the earliest period to the close

Digitized by Google

Planché, J. R.—Continued.
of the 18th century. 3d ed. *Illus.* 8°. *London*, 1874.

Planchette. The despair of science; being a full account of modern spiritualism, its phenomena, and the various theories regarding it. With a survey of French spiritism. 18°. *Boston*, 1869. **Handy volume series, No. 3.**

Plane-table (The) and its use in topographical surveying. From the papers of the United States coast survey. 8°. *New York*, 1869.

——— tables. Messtisch- und Kippregel-Constructionen. *See* **Rudgisch,** von.

PLANETS. Tables for determining the values of the coefficients in the perturbative functions of planetary motion. By J. D. Runkle. **Smiths'n contrib., v. 9.**

PLANING-machines. Case of Brooks et al. vs. Fiske and Norcross. *See* **Brooks,** M. L.

——— ——— Report of the case of Sloat vs. Spring et al. *See* **Harding,** George.

PLANK roads. History, structure and statistics of. *See* **Kingsford,** W.

——— ——— Observations on. *See* **Geddes,** George.

Plantamour, Ph. Rapport sur les progrès de la chimie; trad. par. *See* **Berzelius,** J. J.

PLANTS. *See, also,* **Botany.**

——— Agricultural. Jahresbericht über die landwirthschaftliche Pflanzenproduction. *See* **Henneberg,** W.

——— Beautiful leaved. *See* **Lowe,** E. J.

——— Colored figures of the most beautiful and useful. *See* **Miller,** Philip.

——— Description des plantes potagères. *See* Vilmorin-Andrieux et cie.

——— Ernährung der Pflanzen. *See* **Hlubek,** F. X.

——— The food of. By Odling. *See* **Science lectures for the people, series 3.**

——— Foreign industrial. Fremdländische Pflanzenstoffe zu industriellem Gebrauche, von Julius Wiesner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

——— Insectivorous. *See* **Darwin,** Charles.

——— Loudon's encyclopædia of. *See* **Loudon,** J. C.

——— The natural history of. *See* **Baillon,** H.

——— Pflanzen-Physiologie. *See* **Schleiden,** M. J.

PLANTS. Pflanzenkrankheiten. Für Land- und Forstwirthe, Lehrer, Gärtner, etc. *See* **Ammann,** August.

——— Useful. Gewerbliche Pflanzen. Von Ant. Adam Schmied. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

——— ——— of Great Britain. *See* **Johnson,** C. Pierpoint.

PLASTER. Art de préparer le plâtre. *See* **Martin,** E. **Encyclopédie populaire, v. 11.**

——— Art du mouleur en plâtre, par Fiquet. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v 14.**

——— Die Verfertigung der Gypsfiguren und des Gypsmarmors. *See* **Schmied,** C. **165 Neuer Schauplatz der Künste.**

PLASTERING, Treatise on. *See* **Burnell,** G. R. **Weale's series, No. 45.**

——— Tüncherarbeit. *See* **Hüttmann,** L. **18 Neuer Schauplatz der Künste.**

PLASTIC art. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 27.**

Platform (A) for purchasers; a guide for builders, and a mate for measurers. *See* **Leybourn,** Wm.

PLATING metals. *See, also,* **Galvanoplasty.**

——— ——— **Abridgments English Patents, No. 23.**

——— ——— Die Kunst des Vergoldens, Versilberns, Verplatinirens, etc. *See* **Schmidt,** Christian Heinrich. **133 Neuer Schauplatz der Künste.**

——— ——— Vergoldung, Versilberung, Verplatinirung, etc. *See* **Meyer,** Rudolph.

——— ships. Armament of our ships. Record of United States naval institute. *See* UNITED STATES. **Navy dept.** Ordnance papers.

Plattner, Carl Friedrich. Die metallurgischen Röstprozesse theoretisch betrachtet. 8°. *Freiberg*, 1856.

——— Die Probirkunst mit dem Löthrohre; oder Anleitung Mineralien, Erze, Hüttenprodukte und verschiedene Metallverbindungen mit Hülfe des Löthrohrs zu probiren, etc. 8°. *Leipzig*, 1853.

——— Traité théorique des procédés métallurgiques de grillage. Trad. de l'allemand, annoté et augmenté par Alphonse Fétis. 8°. *Paris et Liége*, 1860.

——— The use of the blowpipe in qualitative and quantitative examination of minerals, ores, furnace products, and

Digitized by Google

Plattner, Carl Friedrich—Continued. other metallic combinations. Edited with emendations, by Sheridan Muspratt; with a preface, by Liebig. 2d ed. *Illus.* 8°. *London and Edinburgh*, 1850.

—— and **Richter,** Theodor. Vorlesungen über allgemeine Hüttenkunde. 2 Bde. 8°. *Freiberg*, 1860.

Playfair, Lyon. On the chemical principles involved in the manufactures of the exhibition, as indicating the necessity of industrial instruction. *See* **Lectures** on the results of the exhibition.

PLAYING and other cards in the British museum, Descriptive catalogue of. *See* **Wilshire,** W. H.

—— cards. Les cartes à jouer et la cartomancie. *See* **Boiteau d'Ambly,** P. [†]

Plays, Four old. *See* **Four** old plays.

Pleasantries about the courts and lawyers of the state of New York. *See* **Edwards,** Charles. [†]

PLEIOCENE fossils of South Carolina. *See* **Tuomey,** M., and **Holmes,** F. S.

Pless, Wilhelm. Fertige Kleider. Hüte aus Filz, Seide und Stroh. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Plessner, F. Anleitung zum Veranschlagen der Eisenbahnen; nebst Preis-Ermittelungen zur Feststellung der Baukosten. 3te Aufl. roy. 8°. *Berlin*, 1874.

Pleyel, Ignace, et cie. Instructions pour le déballage, l'entretien et la conservation des pianos. 8°. *Paris*, 1850. pp. 16.

Plinius Secundus, Caius. The natural history of Pliny. Transl., with notes, by John Bostock and H. T. Riley; with general index. *Illus.* 6 v. 8°. *London*, 1855–57.

PLOUGH, Essay on the. *See* **Bingham,** J.

—— (The), the loom and the anvil. *See* **Skinner,** F. G., and **Finch,** Myron.

PLOUGH-wright's assistant. *See* **Gray,** A.

PLOW. Description de la charrue à soc mobile. *See* **Drée,** M. E. de.

PLOWS. Rapport sur des expériences relatives à la charrue de M. Guillaume. *See* **Yvart.**

—— Report of the trial of, at Utica. *See* **New York** state agricultural society.

Plumb, H. S. Colton's map of the oil district of Pennsylvania; comprising a part of the counties of Crawford, Venango, and Warren. Prepared by. 1 sheet. 1865.

PLUMBING. Art du plombier, par C. M. de la Gardette. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 7 and 13.**

—— Der Brunnenmeister. *See* **Janvier** and **Biston. 45 Neuer Schauplatz der Künste.**

—— Illustrated catalogue of supplies for plumbers, etc. *See* **Carr,** A.

—— Manuel du plombier. *See* **Janvier** and **Biston,** V. **93 Manuels Roret.**

Plumer, Peter W. The carpenter's and builder's guide; a handbook for workmen; a manual of reference for contractors, builders, etc. 8°. *Portland*, 1869.

PLUMES. Art du plumassier. *See* **Celnart,** *Mme.* **88 Manuels Roret.**

PLYMOUTH (England). The Plymouth institution and Devon and Cornwall natural history society. Annual reports and transactions for 1862 and 1863. 8°. *Plymouth*, 1863.

Plympton, G. W. A system of instruction in the practical use of the blowpipe; a graduated course of analysis, for the use of students, with appendix and index. 2d ed. 12°. *New York*, 1868.

PNEUMATIC apparatus. *See* PHILADELPHIA. **Internat. exhib, Group 20.**

—— instruments, Catalogue of. *See* Chamberlain, N. B. and D.

PNEUMATICS. *See* **Hero** of Alexandria.

—— for beginners. *See* **Tomlinson, C. Weale's series, No. 12.**

—— Laws of. *See* **Reid,** H. **Steam** engine.

—— Treatise on. *See* **Lardner,** D. **Lardner's cabinet encyclopædia, v. 103.**

—— Treatise on. By D. Lardner. *See* LONDON. **Society of useful knowledge, v. 1.**

PNEUMONIA: its supposed connection with autumnal fevers. *See* **La Roche,** R.

POCKET books. Die Fabrikation der Portefeuilles. *See* **Kirsch,** A. **202 Neuer Schauplatz der Künste.**

—— reckoner, for timber, planks, boards-saw-logs, etc. *See* **Doyle,** Edward.

POETRY. Method of teaching and studying the belles-lettres, etc. *See* **Rollin,** Charles.

—— of the vegetable world. *See* **Schleiden,** M. J.

POETS, Lives of English. *See* **Bell,** Robert. **Lardner's cabinet encyclopædia, v. 93, 94.**

Digitized by Google

Poggendorff, J. C. Annalen der Physik und der Chemie; hrsg. zu Berlin. B. 1-160, 1824-77. [Ergänzungsband 1-7, 1842-76; Jubelband, 1874; Register, B. 1-60; Namen-Register, 1-150; Sach-Register, 121-150.] 8°. *Leipzig*, 1824-77——.

——— Biographisch-literarisches Handwörterbuch, zur Geschichte der exacten Wissenschaften, enthaltend Nachweisungen über Lebensverhältnisse und Leistungen von Mathematikern, Astronomen, Physikern, Chemikern, Mineralogen, Geologen u. s. w. aller Völker und Zeiten. Gesammelt von. 8°. *Leipzig*, 1863.

Poggiale, A. B. Traité d'analyse chimique, par la méthode des volumes comprenant l'analyse des gaz et des métaux, la chlorométrie, la sulfhydrométrie, l'acidimétrie, l'alcalimétrie, la saccharimétrie, etc. *Illus.* 8°. *Paris*, 1858.

Pohl, J. Die Anlage von Wassermühlen, mit besonderer Berücksichtigung der Terrain-Verhältnisse. 18°. *Wien*, 1865.

Pohl, Johann. Thierzucht. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

POISONS. Anleitung zur Ausmittelung der Gifte. *See* **Otto,** F. J.

——— Detection of. *See* **Otto,** Friedrich Julius.

——— De venenis: a discourse of poysons. *See* **Ramesey,** William.

——— Ermittelung von Giften in Nahrungsmitteln, Luftgemischen, etc. *See* **Dragendorff,** Georg.

——— Gifte und ihre Gegengifte. *See* **Bandlin,** O.

——— in relation to medical jurisprudence and medicine. *See* **Taylor,** Alfred S.

——— Micro-chemistry of. *See* **Wormley,** T. G.

——— Traité de toxicologie. *See* **Orfila.**

Poisson, P. Manuel du marchand papetier et du régleur. *See* **Julia de Fontenelle,** J. S. E. **107 Manuels Roret.**

Poisson, S. D. A treatise on mechanics; transl. from the French with notes, by Henry H. Harte. 2 v. roy. 8°. *London*, 1842.

Poitevin, Alphonse. Traité de l'impression photographique, sans sels d'argent; avec une introduction, par M. Ernest Lacan. 8°. *Paris*, 1862.

Poitevin, Prosper. Nouveau dictionnaire universel de la langue française, rédigé

Poitevin, Prosper—Continued.
d'après les travaux et les mémoires des membres des cinq classes de l'Institut. T. 1-2. *Illus.* 4°. *Paris*, 1856-60.

Pokorny, A. Lehrmittel. Natur-Geschichte. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Polak, J. E. Persien. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Poland, H. Bodkin. The merchandise marks act, 25 and 26 Vict. c. 88. With notes. 16°. *London*, 1862.

POLAND, History of. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 56.**

POLAR sea, The open. *See* **Hayes,** Isaac I.

POLARIZATION. Lectures on polarized light. *See* **Pereira,** Jonathan.

——— Maasbestimmung der Polarisation durch das physiologische Rheoscop. *See* **Harless,** E.

——— of light, Treatise on. By Sir D. Brewster. *See* LONDON. **Society of useful knowledge, v. 1.**

——— Die Polarisationsdifferenzen beim Rohzuckerhandel. *See* **Wackenroder,** B.

Pole, William C. E. Cornish pumping engine. **Weale'e papers on engineering, v. 6.**

——— High pressure steam engine; transl. by. *See* **Alban,** E.

——— Life of R. Stephenson; by. *See* **Jeaffreson,** J. C.

——— Loss by friction in beam and direct action steam engines. **Weale's papers on engineering, v. 2.**

POLISHING. Das Beizen, Schleifen und Poliren. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

——— Schleifen, Poliren, Färben und Verzieren des Marmors. *See* **Weber,** Martin. **268 Neuer Schauplatz der Künste.**

POLITICAL constitutions, Essay of the generative principle of. *See* **Maistre,** Joseph de.

——— economy. Création de la propriété intellectuelle; de la nécessité et des moyens d'organiser l'industrie, de moraliser le commerce, et de discipliner la concurrence. *See* **Jobard,** J. B. A. M.

——— ——— Économie politique. *See* **Mathieu de Dombasle,** C. J. A.

——— ——— Économie politique, ou principes de la science des richesses. *See* **Droz,** F. X. J.

Digitized by Google

POLITICAL economy, Elements of. *See* **Perry**, Arthur Latham.

——— ——— Essays on the progress of nations, in civilization, production, industry, wealth, and population. *See* **Seaman**, E. C.

——— ——— Études d'économie politique. *See* **Wolowski**, L.

——— ——— Jahrbuch für Volkswirthschaft. *See* **Hübner**, O.

——— ——— Journal des économistes; revue d'économie politique et des questions agricoles, manufacturières et commerciales. *See* **Journal.**

——— ——— Kapital und Arbeit. *See* **Knight**, Charles. **Wochenbände, 69–73.**

——— ——— Le monautopole; ou code complémentaire d'économie sociale, réglant les droits et les devoirs de l'inventeur, du fabricant, du marchand et de l'ouvrier. *See* **Jobard**, J. B, A. M.

——— ——— National system of. Transl. from the German by G. A. Matile. *See* **List**, Frederick.

——— ——— The nature and causes of the wealth of nations. *See* **Smith**, A.

——— ——— Nouvelle économie sociale; ou monautopole industriel, artistique, commercial et littéraire. *See* **Jobard**, J. B. A. M.

——— ——— The philosophy of trade, etc. *See* **Stirling**, Patrick James.

——— ——— Principles of. *See* **Mill**, J. S.

——— ——— Principles of. *See* **Vethake**, H.

——— ——— Du prix des grains, du libre échange et des réserves. *See* **Briaune.**

——— ——— Projet de loi sur modèles, etc., du privilège pour organiser l'industrie, etc. *See* **Jobard**, J. B. A. M.

——— ——— Public economy of the United States. *See* **Colton**, C.

——— ——— The science of wealth. *See* **Walker**, Amasa.

POLITICS, A handbook of. *See* **McPherson**, Edward.

Pollak, Anthony. In the matter of interference between the application of Emery and Johnson, assignees of A. F. Johnson, for improvement in sewing-machines, and the patents to James E. A. Gibbs. Argument. 8°. pp. 33. *n. t. p.*

Pollard, A. Pollard and Minkler's obstetrical supporter; a description of its application, use and beneficial effects. 12°. *Keeseville, N. Y.*, 1849.

Pollen, John Hungerford. Ancient and modern furniture and woodwork. *Illus.* [*London*, 1875.] **South Kensington art and science handbooks, No. 3.**

——— Universal catalogue of books on art: comprehending painting, sculpture, architecture, decoration, coins, antiquities, etc. [From 'Notes and queries'.] 4°. *London*, 1868–70. *n. t. p.*

Polonceau, Camille. Handbuch für Locomotiven-Führer, von. *See* **Flachat**, E. **127, 192 Neuer Schauplatz der Künste.**

——— Translation of 'Portefeuille de l'ingénieur des chemins de fer, par'. *See* **Brees**, S. C. Railway practice, series 3 and 4.

POLYCHROMY, Origin of, by G. Semper. *See* **Jones**, O. **Crystal palace library, v. 1.**

——— Polychromatic ornament; plates in gold, silver and colours; specimens of the various styles of ancient, oriental and mediæval art. *See* **Racinet**, A.

POLYGRAPHIC dictionary. *See* **Dictionarium** polygraphicum.

Polygraphice; or the art of drawing, sketching, limning, painting, etc. *See* **Salmon**, William.

Polytechnic (The) journal. A monthly magazine of art, science and general literature. v. 1–9, 1830–43. 8°. *London*, 1830–43.

——— (The) review and magazine of science, literature and the fine arts. Jan.–June, 1844; July–Dec., 1844; Jan.–June, 1845. [The vol. for Jan.–June, 1844, is entitled 'The London polytechnic magazine and journal', ed. by Thomas Stone; July–Dec., 1844, ed. by George G. Sigmond and Thomas Stone; Jan.–June, 1845, ed. by George G. Sigmond, is called vol. 2.] 8°. *London*, 1845.

POLYTECHNICS. Allgemeine polytechnische Zeitung und Handlungs-Zeitung. *See* **Allgemeine.**

——— The American polytechnic journal. *See* **American.**

——— The polytechnic review. *See* **Illustrated** polytechnic review.

——— Polytechnische Centralhalle, etc. *See* LEIPSIC.

——— Polytechnische Gesellschaft (Die Leipziger). *See* LEIPSIC.

Digitized by Google

POLYTECHNICS. Polytechnische Schule zu Dresden. Katalog der Bibliothek. *See* DRESDEN.

——— Polytechnisches Archiv. *See* **Polytechnisches.**

——— Polytechnisches Journal. *See* **Dingler, Johann Gottfried.**

——— Polytechnisches Notizblatt. *See* **Böttger, Rud.**

——— Der praktische Techniker der Neuzeit und Neueste Erfindungen und Erfahrungen. *See* **Praktische** *and* **Neueste.**

——— Recueil de la Société polytechnique. *See* PARIS. **Société** polytechniqne.

——— Royal Cornwall polytechnic society. Annual report. *See* FALMOUTH.

——— Schweizerisches Polytechnikum. Verzeichniss der Bibliothek. *See* ZÜRICH.

——— Westphälische polytechnische Schule zu Aachen. *See* AACHEN.

Polytechnisches Archiv, oder Sammlung gemeinnütziger Mittheilungen für Land- und Hauswirthe, Kaufleute, Baukünstler, Fabrikanten und Gewerbtreibende jeder Art. 5ter Jahrg. *Illus.* 4°. *Berlin*, 1841.

——— Centralblatt. Mit Tafeln, Abbildungen und Holzschnitten. Jhrg. 1-40. 50 Bde. [With 3 v. plates. From 1835-46, plates bound separately, in 3 v.; afterward, pls. bound with text. From 1835-42, 2 v. each year, 8°; from 1843-46, new series, 2 v. a year, 8°; from 1847 a new series, 1 v. a year, 4°. 2d series ed. by J. A. Hülsse and A. Weinlig; 3d series ed. by Hülsse, Stöckhardt, Schnedermann, Brückmann, Stein, Böttcher, Kellerbauer, Judenfeind-Hülsse.] 8° and 4°. *Leipzig*, 1835-75.

——— Journal. *See* **Dingler**

POMOLOGY. American apples. *See* **Warder, John A.**

——— *See* PHILADELPHIA. **Internat. Exhib. 1876, Group 36.**

——— American pomological society. *See* **American.**

——— Illustrirtes Handbuch der Obstkunde. *See* **Illustrirtes.**

Pomona. Allgemeine deutsche Zeitschrift für den gesammten Obst- und Weinbau. Centralblatt der Pomologie, von Friedrich Jak. Dochnahl. 7 Bde. Jahrg. 3-9. 8°. *Nürnberg*, 1854-60.

POMPEII. Its history, buildings, and antiquities. *See* **Dyer**, Thomas H. [?]

——— The Pompeian court, in the Crystal palace. *See* **Scharf**, G. **Crystal palace library, v. 3.**

Poncelet, *M. l'Abbé.* La nature dans la formation du tonnerre, et la reproduction des êtres vivans; pour servir d'introduction aux vrais principes de l'agriculture. 18°. *Paris*, 1766.

Poncelet, Jean Victor. Papers on practical engineering, No. 3. Sustaining walls; geometrical constructions to determine their thickness under various circumstances; derived chiefly from a memoir of Poncelet, with extensions, by D. P. Woodbury. 8°. *Washington*, 1845. [2 copies.]

——— Über die Girardsche Schiffschleuse mit Schwimmer. Nach dem Französischen des Poncelet, mit einigen Anmerkungen von A. L. Crelle. *Illus.* 4°. *Berlin*, 1846.

Poncelet, Martin. Essai sur l'art de tracer la menuiserie et les objets mécaniques. L'art du trait mis en pratique. 4°. *Liége*, 1835.

Ponsort, Le Bon de. Monographie du genre œillet, et principalement de l'œillet flamand. 18°. *Paris*, 1844.

Ponting, T. Cadby. Photographic difficulties; how to surmount them. Instantaneous pictures; how to obtain them. 12°. *Bristol*, 1862.

Pontzen, Ernest. Das Eisenbahnwesen in den Vereinigten Staaten. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 13.**

Pook, Samuel M. A method of comparing the lines and draughting vessels propelled by sail or steam. 8°. *New York*, 1866.

Poole, William Frederick. An index to periodical literature. 8°. *New York*, 1853.

Poor, Henry V. American railroad journal. Ed. by. *See* **American.**

——— History of the railroads and canals of the United States of America; exhibiting their progress, cost, revenues, expenditures, and present condition. 3 v. [With maps.] 8°. *New York*, 1860.

——— Influence of the railroads of the United States in the creation of its commerce and wealth. 8°. *New York*, 1869. pp. 42.

Pope, Frank L. Modern practice of the electric telegraph; a handbook for electricians and operators. 7th ed. 8°. *New York*, 1872.

Digitized by Google

Pope, Thomas. A treatise on bridge architecture, in which the superior advantages of the flying pendent lever bridge are fully proved. With an historical account and description of different bridges erected in various parts of the world. 8°. *New York,* 1811.

Popovic, Alex., and **Mayer,** Carl. Heeresverpflegung. Heeresausrüstung. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

POPPY. Kultur des Mohns. *See* **Odeph,** A.

Popular essay on vaccination, by a physician. 8°. *New York,* 1835.

—— science monthly, conducted by E. L. Youmans. v. 1–10, 1872–77. 8°. *New York,* 1872–77——.

—— science review. A quarterly miscellany of entertaining and instructive articles on scientific subjects. v. 1–16, 1862–76. [v. 1, 2, ed. by James Samuelson; v. 3–15 ed. by Henry Lawson.] 8°. *London,* 1862–77——.

POPULATION of the United States. *See* UNITED STATES. **Interior dept.** Census bureau.

—— Sur l'accroissement de la population de la Belgique, 1831 à 1840. *See* **Heuschling,** X.

—— Ueber die Gliederung der Bevölkerung des Königreichs Bayern. *See* **Hermann,** F. B. N. von.

PORCELAIN. Abridgments English Patents, No. 24.

—— *See* PHILADELPHIA. **Internat. Exhib. 1876, Group 2.**

—— Art de la porcelaine, par le Comte de Milly. PARIS. **Acad. roy. des sc.; arts et métiers, v. 1 and 8.**

—— baking. Gasöfen für das Brennen von Porzellan, etc. *See* **Stegmann,** H.

—— Century of potting in Worcester; the royal porcelain works. *See* **Binns,** R. W.

—— Das Coloriren und Decoriren des Porcellans. *See* **Brongniart,** A. **146 Neuer Schauplatz der Künste.**

—— English pottery and. *See* **English** pottery.

—— Fabrikation des weissen Feldspathporzellans. *See* **Strele,** Karl. **75 Neuer Schauplatz der Künste.**

—— Histoire et fabrication de la porcelaine chinoise. *See* **Julien,** M. Stanislas.

PORCELAIN. History of pottery and porcelain, mediæval and modern. *See* **Marryat,** Joseph.

—— Koloriren und Dekoriren von Porzellan, etc. *See* **Strele,** Karl. **146 Neuer Schauplatz der Künste.**

—— Die Kunst Porzellan anzufertigen. *See* **Schumann,** L. F. **75 Neuer Schauplatz der Künste.**

—— Manufacture of porcelain and glass. *See* **Porter,** G. R. **Lardner's cabinet cyclopædia, v. 132.**

—— manufacturer. Manuel du porcelainier, du faïencier et du potier. *See* **Boyer, 35 Manuels Roret.**

—— painting. Die Porzellanmalerei, ihre Technik und Anwendung für Dillettanten. *See* **Karner,** C. J.

—— pictures, Formula for making. *See* **Reynolds,** George L.

—— —— Instructions how to make photographs on porcelain, or opal glass. *See* **Towler,** John.

—— Pottery and; of all times and nations. *See* **Prime,** William C.

PORK butcher. Manuel du charcutier. *See* **Celnart,** *Mme.* **55 Manuels Roret.**

Porro, I. Sur le perfectionnement pratique des appareils optiques pour l'astronomie et pour la photographie. Bases d'une théorie microdynamique générale expliquant tous les phénomènes de la lumière, de la chaleur et de l'électricité. 8°. *Paris,* 1858.

Porta, Joannes Baptista, *Neapolitanus.* De distillatione. Lib. 9. Quibus certa methodo, multipliciq'; artificio, penitioribus naturae arcanis detectis, cuiuslibet mixti in propria elementa resolutio perfecte docetur. sm. 4°. *Romae,* 1608.

—— Natural magick. 20 books; wherein is set forth all the riches and delights of the natural sciences. roy. 8°. *London,* 1658.

Portefeuille économique des machines d'outillage et du matériel relatifs à la construction des chemins de fer, aux routes, aux mines, à la navigation, à la télégraphie, etc.; par C. A. Oppermann. T. 1–20. fol. *Paris,* 1856–76——.

Porter, George Richardson. The progress of the nation; in its various social and economical relations, from the beginning of the 19th century to the present time.

Digitized by Google

Porter, George Richardson—Continued. Sections 1–8. [Bound in 3 v.] 12°. *London*, 1836–43. Also, ed. in 3 v. 8°. 1847.

——— A treatise on the origin, progressive improvement and present state, of the manufacture of porcelain and glass. 16°. *London*, 1832. **Lardner's cabinet cyclopædia, v. 132.**

——— Treatise on the origin, progressive improvement, and present state of the silk manufacture. *London*, 1831. **Lardner's cabinet cyclopædia, v. 128.**

——— Statistics by. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.

Porter, Noah. American dictionary of the English language. Revised by. *See* **Webster,** Noah.

——— Vocabularies of scripture, classical and geographical names. *See* **Webster,** N. **Dictionary** of the English language.

Porter, Rufus. Aerial navigation: the practicability of traveling pleasantly and safely from New York to California in three days, fully demonstrated, with a full description of a perfect aerial locomotive, with estimates. 8°. *New York*, 1849. pp. 16.

Porter, W. A. An essay on the life, character and writings of John B. Gibson. 8°. *Philadelphia*, 1855.

Porter, William T. Instructions to sportsmen. Ed. by. *See* **Hawker,** P.

Portes cochères des maisons de Paris. *See* **Krafft,** J. Ch.

PORTFOLIOS. Abridgments English Patents, Nos. 43 and **26.**

PORTLAND-cement-concrete. *See* **Hyatt,** Thaddeus. [†]

——— cement. Die Portland-Cement-Fabrication. *See* **Lipowitz,** A.

——— prison, England. *See* **Jebb,** *Lieut. Col.*

Portlock, Joseph Ellison. A rudimentary treatise on geology. 3d ed. 12°. *London*, 1853. **Weale's series, No. 3.**

Portlock, Nathaniel. A voyage round the world, but more particularly to the northwest coast of America, performed in 1785–1788, in the King George and Queen Charlotte, Captains Portlock and Dixon. 4°. *London*, 1789.

PORTRAIT painting. *See* **Burnet,** John.

——— painting in water colors. *See* **Merrifield,** *Mrs.*

PORTRAITS. The portrait-gallery of the Crystal palace. *See* **Phillips,** S. **Crystal palace library, v. 3.**

PORTSMOUTH, Canon monstre de. *See* **Adts,** N.

——— Improvement of Portsmouth harbor. By S. Bentham. **Weale's papers on engineering, v. 6.**

PORTUGAL. Droits du Portugal sur les territoires de la côte occidentale d'Afrique. *See* **Sá da Bandeira,** *Vicomte* de.

——— Droits du Portugal sur les territoires situés sur la côte occidentale d'Afrique. *See* **Santarem,** *Vicomte* de.

——— History of. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 23–27.**

——— Imprensa nacional. Breve noticia da imprensa nacional de Lisboa. Nova edição. [In French and Portuguese.] 8°. *Lisboa*, 1869.

——— Lives of literary and scientific men of. *See* **Shelby,** M. W., and others. **Lardner's cabinet cyclopædia, v. 88–90.**

——— Printing in. The national printing office in Lisbon. *See* LISBON.

Portwine, Edward. The steam engine, atmospheric railways, the electric printing telegraph, and screw propeller. Illustrated by E. Williams. 2d ed. 24°. *London*, 1847.

Poschacher, Anton. Architektur und öffentliche Bauten. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 14.**

Positive medical agents; being a treatise on the new alkaloid, resinoid, and concentrated preparations of indigenous and foreign medical plants. By authority of the American chemical institute. roy. 8°. *New York*, 1855.

POSITIVISM. Comte's philosophy. *See* **Comte,** Auguste.

——— The positivist's calendar. *See* **Edger,** Henry.

Post, Julius. Grundriss der chemischen Technologie. 1. Hälfte. Fabrikation der Rohprodukte. *Illus.* 8°. *Berlin*, 1877.

POST office (England), History of. *See* **Lewins,** William.

——— offices. List of post offices in the United States, 13th July, 1857. *See* **Leech,** D. T. T.

——— ——— United States official postal guide. *See* UNITED STATES. **Post office dept.**

——— pleiocene fossils of South Carolina. *See* **Holmes,** Francis S.

Digitized by Google

POST roads, United States statutes relating to. *See* UNITED STATES. **Congress.**

POSTAGE stamps, A descriptive catalogue of American and foreign. *See* **Trifet,** F.

——— ——— Foreign, colonial, and British. *See* **Lincoln,** William, *jr.*

POTASH, Nitrate of. Die Zersetzungen salpetersaurer Salze durch Kohle. *See* **Vogel,** A.

——— Der Potaschensieder. *See* **Wölfer,** M. **94 Neuer Schauplatz der Künste.**

POTATO rot. Die Krankheit der Kartoffeln im Jahre 1845. *See* **Focke,** Gustav Waldemar.

——— ——— Die sogenannte Kartoffelfäule. *See* **Petzhold,** Alexander.

POTATOES. Anweisung die Kartoffeln zu verbessern, von C. F. Plack. *See* **Vermischte Schriften, 2.**

——— Die Bierbrauerei aus Kartoffeln. *See* **Ludowig,** H. **164 Neuer Schauplatz der Künste.**

——— Vorschriften den grössten Nutzen aus den Kartoffeln zu ziehen. *See* **Hundertundsiebenzehn** Vors hriften.

Potier des Echelles, R. B. Das Heerwesen, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1 and 26.**

POTOMAC aqueduct. Hydrographic survey of the Potomac river near Georgetown, made in the fall of 1832; showing the position of the aqueduct, its connection with the Chesapeake and Ohio canal on the north bank, etc. Survey made in the fall of 1832. fol. *Washington,* 1837.

Potter, Edward Tuckerman. World pictures in capitals; with a descriptive legend. By Henry Coppée. 4°. *Philadelphia,* 1869.

Potter, Orlando B. Decisions in the sewing machine cases of Potter and Wheeler vs. Wilson and Stockmarr, etc. *See* **Nelson,** S., and **Smalley,** D. C.

Potter's complete Bible encyclopedia: a universal treasury of religious knowledge, embracing in one consecutive alphabetical order, a complete Bible dictionary; an ecclesiastical, biographical, and geographical dictionary: with an appendix, containing much valuable matter. Ed. by William Blackwood. *Illus.* 3 v. 4°. *Philadelphia,* [1875]. [†]

POTTERY. Abridgments English Patents, No. 24.

POTTERY. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 2.**

——— and porcelain, British. *See* **De la Beche,** Henry, and **Reeks,** Trenham.

——— and porcelain of all times and nations. *See* **Prime,** William C.

——— and porcelain, glass, enamel, etc. *See* **Burty,** Philippe.

——— Art du potier de terre, par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sc.; arts et métiers, v. 13 and 8.**

——— Century of potting, in the city of Worcester. *See* **Binns,** R. W.

——— English pottery and porcelain. *See* **English.**

——— Gasöfen für das Brennen von Porzellan. *See* **Stegmann,** H.

——— History of. *See* **Marryat,** Joseph.

——— History of ancient. *See* **Birch,** S.

——— Josiah Wedgwood, and the potteries of Staffordshire. *See* **Jewitt,** Llewellyn.

——— Life of Josiah Wedgwood, and sketch of the art of pottery in England. *See* **Meteyard,** Eliza.

——— machines. Maschinen in der Thonwaaren-Industrie; von Emil Teirich. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

——— Manuel du potier de terre. *See* **Boyer. 35 Manuels Roret.**

Pötzsch, Eduard. Entwürfe zu Stubenöfen in Kachel- und Thon-Construction so wie zu solchen Oefen mit eisernen Kasten versehen. *Illus.* 4°. *Glogau,* 1860.

Pouchet, M. Leon. Injectors; their theory and use. *Illus.* 18°. *New York,* 1877. **Van Nostrand's science series, No. 29.**

Pouillet, Claude Servais Mathias. Die Anlegung der Blitzableiter, v. *See* **Gay-Lussac,** J. L. **229 Neuer Schauplatz der Künste.**

——— Elementi di fisica sperimentale e di meteorologia. Tomo 1-2. 8°. *Napoli,* 1844.

——— Institut impérial de France. Mémoire sur la densité de l'alcool, sur celle des mélanges alcooliques et sur un nouveau mode de graduation de l'aréomètre à degrés égaux. Lu à l'Académie des sciences le 16 mai 1859. [Extrait du T. 30 de l'Académie des sciences.] 4°. *Paris,* 1859.

——— Lehrbuch der Physik und Meteorologie, für deutsche Verhältnisse frei be-

Digitized by Google

Pouillet, C. S. M.—Continued.
arbeitet von Joh. Müller. 3 Bde. B. 1-2. Physik und Meteorologie. B. 3. Kosmische Physik. Mit Atlas zum Lehrbuch der Kosmischen Physik; und mathematischem Supplement-Band, 1860. 4te Aufl. 8°. *Braunschweig*, 1853-60.

POULTRY. Domestic fowls and ornamental poultry. *See* **Richardson,** H. D. **Saxton's rural handbooks, v. 3.**

——— guide, The American. *See* **Wendell,** E. A.

——— A guide to their breeding, feeding and exhibiting. *See* **Watts,** Elizabeth.

——— yard, The American. *See* **Browne,** D. J.

Pourain, A. Florent. Thèse de physique météorologique. Comparaison de la marche de la température à l'air, dans le sol et au fond d'un puits, pendant les années 1856 et 1857. 4°. *Lyon*, 1858. pp 21. [Bound with 'Thèses pour obtenir le grade de docteur ès sciences physiques'.]

——— Thèses présentées à la faculté des sciences de Lyon, pour obtenir le grade de docteur. 4°. *Lyon*, 1858.

Poussin, Guillaume Tell. De la puissance américaine. Origine, institutions, esprit politique; ressources militaires, agricoles, commerciales et industrielles des États-Unis. 3e éd. T. 1-2. 8°. *Paris*, 1848.

——— The United States; its power and progress. Trans. from the French, by Edmund L. Du Barry. 1st Amer. ed. from 3d Paris ed. 8°. *Philadelphia*, 1851.

POWDER. Handbuch der Pulverfabrikation. *See* **Hartmann,** R. F. A. **113 Neuer Schauplatz der Künste.**

——— magazines. Regulations for powder magazines and shell houses. *See* UNITED STATES. **Navy** dept. Ordnance papers.

Powell, Baden. Biographies of distinguished scientific men. Transl. by. *See* **Arago,** D. F. J.

——— Lectures on polarized light; ed. by. *See* **Pereira,** J.

Powell, G. D. The practice of medical electricity, showing the most approved apparatus, their method of use, and rules for the treatment of nervous diseases; more especially paralysis and neuralgia. 18°. *Dublin*, 1869.

Powell, John Wesley. Exploration of the Colorado river of the west, and its tributaries. Explored in 1869-1872; under direction of the secretary of the Smithsonian institution. 4°. *Washington*, 1875.

——— Geological and geographical survey of the territories. *See* UNITED STATES. **Interior** department.

——— Introduction to the study of Indian languages; with words, phrases and sentences to be collected. 4°. *Washington*, 1877.

——— Report on the geology of the Uinta mountains. *See* UNITED STATES. **Interior** department.

POWER in motion; horse power, wheel gearing, driving bands and angular forces. *See* **Armour,** James.

——— of water, Treatise on. *See* **Glynn,** Joseph. **Weale's series, Nos. 82, 82*.**

——— punches, shears and hammers. *See* Long, Allstatter, and co.

Power, wisdom, and goodness of God. *See* **Chalmers,** Thomas.

Pownall, Thomas. Notices and descriptions of antiquities of the provincia Romana of Gaul, now Provence, Languedoc and Dauphine; with dissertations on the subjects of which those are exemplars, and an appendix describing the Roman bath and thermæ discovered in 1784, at Badenweiler. 4°. *London*, 1788.

Practical housewife; forming a complete encyclopædia of domestic economy. By the editors of the 'Family friend.' 12°. *London, n. d.*

——— magazine; an illustrated cyclopædia of industrial news, inventions and improvements, collected from foreign and British sources, for the use of those concerned in raw materials, machinery, manufactures, building, and decoration. v. 1-7. 4°. *London*, 1873-77——.

——— mechanic and engineer's magazine. 1st series, v. 1-4, 1842-45. 2d series, v. 1-2, 1846-47. 4°. *Glasgow*, 1842-47.

——— mechanic's journal. 1st series, v. 1-8, 1848-56. 2d series, v. 1-9, 1856-65. 3d series, v. 1-5, 1865-70. 4°. *Glasgow and London*, 1848-70.

——— observations on ventilating and warming public edifices. 2d ed., with additions. *Illus.* 8°. *London*, 1829.

——— perspective; or an easy method of representing natural objects according to the rules of art; applied and exemplified

Digitized by Google

Practical—Continued.
in all varieties of cases, as gardens, landscapes, and buildings of divers kinds. Written in French, by a Jesuit of Paris; transl. by E. Chambers. 7th ed. 4°. *London, n. d.*

—— treatise on manures, from the recent publication of the British society for the diffusion of useful knowledge; with additional notes, by the American editor. 12°. *Philadelphia*, 1851.

PRACTICE of medicine. *See* **Medicine** *and* **Pathology.**

Praktische (Der) Techniker der Neuzeit auf allen Gebieten. Monatsschrift für Industrielle jeder Berufsart. Hrsg. und red. von Theodor Köller. Jahrg. 1-2. *Illus.* 8°. *Regensburg*, 1872-73. [Continued as 'Neueste Erfindungen und Erfahrungen.']

Practisches Handbuch des Seiden-Manufacturwesens. 2te Ausgabe. *Illus.* 8°. *Weimar*, 1847. **116 Neuer Schauplatz der Künste.**

Pradal, P., and **Malepeyre,** F. A complete treatise on perfumery; containing notices of the raw material used in the art, and the best formulæ. Transl. from the French, with extensive additions, by H. Dussauce. 8°. *Philadelphia*, 1864.

PRAGUE. Ingenieur- und Architekten-Verein in Böhmen. Technische Blätter. Viertel-Jahrschrift. Redigirt von Friedrich Kick. Jahrg. 1-5. 8°. *Prag*, 1869-73.

—— K. K. patriotisch ökonomische Gesellschaft in Böhmen. Centralblatt für die gesammte Landeskultur. Jahrg. 4-15. 4°. *Prag*, 1853-64.

—— Politisch-oeconomische Gesellschaft. Wochenblatt der Land-, Forst- und Hauswirthschaft, für den Bürger und Landmann. Jahrg. 14-15. 4°. *Prag*, 1863-64.

—— Schafzüchter-Verein für Böhmen. Verhandlungen des Ausschusses. Heft 3-13 [in 2 Bände]. 8°. *Prag*, 1834.

Prairie farmer. Annual and horticultural advertiser for 1869; containing valuable suggestions for western farmers, fruit-growers and florists. 12°. *Chicago*, 1869.

Pratt, S. Clesson. Hydrokonion or catarrh, and its complications; comprising the causes, symptoms and treatment of medical hydrokonia. 12°. *Boston*, 1865.

Pratt and co. Illustrated catalogue and price list of locks, latches; builders, housekeepers and mechanics' hardware; also agricultural instruments, etc. 8°. *Buffalo, N. Y.*, 1861.

Preaux-Callot, —. Manuel du bonnetier. *See* **Leblanc,** V. **98 Manuels Roret.**

Prechtl, Johann Jos. Technologische Encyclopädie, oder alphabetisches Handbuch der Technologie, der technischen Chemie und des Maschinenwesens, hrsg. von. B. 1-20. Supplement, 4 Bde., 1857-69. [Pl. bd. in 10 v., with 4 suppt.] 8°. *Stuttgart, Wien*, 1831-69.

PRECIOUS metals. Die edlen Metalle und Schmucksteine. *See* **Rudolph,** A.

—— ——. Historical inquiry into the production and consumption of. *See* **Jacob,** William.

—— —— Natural history of precious stones and. *See* **King,** C. W.

—— —— Production des métaux précieux du Mexique. *See* **Duport,** St. Clair.

—— —— The production of, statistical notices of the principal gold and silver producing regions of the world. *See* **Blake,** William P.

—— —— Report on, by W. P. Blake. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 2.**

—— stones and antique gems, Manual of. *See* **Westropp,** Hodder M.

—— —— and the precious metals, Natural history of. *See* **King,** C. W.

—— —— Traité complet des pierres précieuses; contenant leur étude chimique et physique. *See* **Barbot,** Charles.

—— —— Traité des caractè es physiques des pierres précieuses. *See* **Haüy,** L'Abbé.

PRECISION, Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 25.**

Preece, W. H., and **Sivewright,** J. Telegraphy. Text books of science, adapted for the use of art sans and students, in public and science schools. 12°. *New York*, 1876.

PRE-HISTORIC phases. Introductory essays on pre-historic archæology. *See* **Westropp,** Hodder M.

—— times; illustrated by ancient remains, and the manners and customs of modern savages. *See* **Lubbock,** John.

Digitized by Google

Preis-Verzeichniss der Werkzeuge und Modelle aus der Ackergeräthe-Fabrik des K. Württemberg. land- und forstwirthschaftlichen Instituts Hohenheim. *Illus.* 4°. *Stuttgart*, 1863. pp. 45.

Prescott, George B. Electricity and the electric telegraph. *Illus.* 8°. *New York*, 1877.

——— History, theory and practice of the electric telegraph. 8°. *Boston*, 1860. Also, 3d ed., 1866.

Prescott, Henry P. Tobacco and its adulterations. *Illus.* 8°. *London*, 1858.

PRESERVATION of animal and vegetable substances, Observations on. *See* **Observations.**

——— of food. Die Conservirung der Thier- und Pflanzenstoffe (Nahrungsmittel, etc.). *See* **Mierzinski,** Stanislaus.

——— of wood. *See* **Britton,** Thomas Allen.

PRESIDENTS of the United States, Addresses and messages of, with memoirs. *See* **Williams,** E.

PRESSES. Construction einer Trauben- und Saftpresse. *See* **Wölfer,** M.

——— Musterzeichnungen von Pressen. *See* HESSE-DARMSTADT.

Pressler, Max Robert. Der Zeitmessknecht oder der Messknecht als Normaluhr. Ein Brieftascheninstrument und Tabellenwerk zur leichten und bequemen Messung der Zeit und Stellung der Uhren nach der Sonne; sowie zur vereinfachten Ausführung mannigfaltiger bürgerlicher, technischer und wissenschaftlicher Messungs- und Rechnungs-Arbeiten. 1-2. Theil. *Illus.* sm. 8°. *Braunschweig*, 1856

Prestel, M. A. F. Das astronomische Diagramm, ein Instrument mittelst dessen der Stand und Gang einer Uhr, das Azimuth terrestrischer Gegenstände, die Mittagslinie, die Abweichung der Magnetnadel, der Auf- und Untergang der Gestirne bestimmt und andere Aufgaben ohne Rechnung gelöst werden können. *Illus.* 8°. and obl. 4°. *Braunschweig*, 1859.

——— Der Barometerstand und die barometrische Windrose Ostfrieslands. Nach Beobachtungen berechnet. 4°. *Emden*, 1860. pp. 38. **Naturf. Gesells. Kleine Schriften, 6.**

——— Beiträge zur Kenntniss des Klima's von Ostfriesland. 8°. *Emden*, 1858. pp. 26. **Naturf. Gesells. Kleine Schriften, 5.**

Prestel, M. A. F. Ergebnisse der Witterungs-Beobachtungen zu Emden, in den Jahren 1860 und 1861, 1862-3, 1864-73, sowie Andeutungen über die Beziehung der Witterung zur Seefahrt, Landwirthschaft, dem Gesundheitszustande u. s. w. 4°. *Emden*, 1862. pp. 24. **Naturf. Gesells. Kleine Schriften, 9, 11, 17.**

——— Das geographische System der Winde über dem atlantischen Ocean, in der vom Aequator nach den Angelpunkten der Erde gehenden Richtung. Durch leicht verständliche Formeln dargestellt. 4°. *Emden*, 1863. pp. 35. **Naturf. Gesells Kleine Schriften, 10.**

——— Das Gesetz der Winde,— abgeleitet aus dem Auftreten derselben über Nordwest-Europa. 4°. *Emden*, 1869. pp. 26. **Naturf. Gesells. Kleine Schriften, 14.**

——— Die Gewitter des Jahres 1855. Ein Beitrag zur Physiologie der Atmosphäre. Mit einer Karte. 8°. *Emden*, 1856. pp. 23. **Naturf. Gesells. Kleine Schriften, 4.**

——— Der kaiserlichen naturforschenden Gesellschaft zu Moskau zur Feier ihres fünfzigjährigen Bestehens am 23. December 1855, die naturforschende Gesellschaft zu Emden. Inhalt: Die Temperatur von Emden. 4°. *Emden*, 1855. pp. 10.

——— Meteorologische Untersuchungen betreffend die Verbreitung des Moorrauchs in den Tagen vom 20. bis 26. Mai 1860, die isobarometrischen Linien am 22. Mai und die Gewitter am 20. und 26. Mai 1860. *Illus.* 4°. *Emden*, 1861. pp. 24. **Naturf. Gesells. Kleine Schriften, 8.**

——— Die Regenverhältnisse des Königreichs Hannover, etc. *See* EMDEN. **Naturf. Gesells. Kleine Schriften.**

——— Der Sturmwarner und Wetteranzeiger, ein Instrument zur Vorherbestimmung von Sturm und Wetter. 8°. *Emden und Aurich*, 1870.

——— Die Temperatur-Verhältnisse und die mit Höhe zunehmende Temperatur in der Schicht des Luftmeeres. 8°. *Emden*, 1871. **Naturf. Gesells. Kleine Schriften, 15.**

Preston, Lyman. Treatise on book-keeping. 41st ed. roy. 8°. *New York*, 1853.

Prévost, Hypolite. Nouveau manuel de sténographie. *Illus.* 4e éd. *Paris*, 1834. **22 Manuels Roret.**

Digitized by Google

Prevost, Louis. California silk growers' manual; with twelve years' experience in raising the mulberry, and six years in raising the silkworm. 12°. *San Francisco,* 1867.

Price, —. Carpentry and joinery of roofs. *See* **Robison,** J., **Price,** and **Tredgold,** T. **Weale's series, No. 124.**

Price, George. A treatise on fire and thief-proof depositories, and locks and keys. 8°. *London,* 1856.

Price, John L. The medical experience of thirty years practice in the treatment of certain acute and chronic diseases; comprising fevers, dyspepsia, liver complaints, diseases of the lungs, diseases of the heart, etc. 8°. *Lexington, Ky.,* 1852.

Price, Joseph M. Tables of French exchange; showing the value of francs and centimes in dollars and cents at all the different rates of exchange. 8°. *New York,* 1848.

Price, Lake. A manual of photographic manipulations, treating of the practice of the art, and its various applications to nature. 8°. *London,* 1858.

——— Silver sunbeam; a text book on sun drawing and photographic printing. *See* **Towler,** J.

Price's patent candle co., Manufactures of, with an account of the introduction and some of the uses of glycerine. *See* **Wilson,** G. F.

PRICES, History of, and the state of the circulation, from 1793 to 1847, inclusive; sketch of the state of the corn trade, with remarks on the corn laws, etc. *See* **Tooke,** T.

——— History of. Beiträge zur Geschichte der Preise. Von C. Thdr. Inama-Sternegg. *See* VIENNA. **Gen.-Dir. der Weltauss. 1873. Bericht. Gruppe 20.**

Prichard, James Cowles. Ethnology, by. *See* **Herschel,** J. F. W. **Manual** of scientific enquiry.

Prideaux, T. Symes. Economy of fuel, particularly with reference to reverberating furnaces for the manufacture of iron, and to steam boilers. 12°. *London,* 1853. **Weale's series, No. 77.**

Priestley, Joseph. The history and present state of electricity, with original experiments. 4°. *London,* 1767.

Priestley, Joseph. Lecture on his life and chemical work. *See* **Science lectures for the people, series 6.**

Prime, Temple. List of shells of North America, by. **Smiths'n misc. coll., v. 2.**

Prime, William C. Pottery and porcelain of all times and nations; with tables of factory and artist's marks for the use of collectors. roy. 8°. *New York,* 1878.

PRIME numbers and prime factors, Tables of. *See* **Hinkley,** Edward.

PRIMERS, Naval; particularly of the United States. *See* **Dahlgren,** J. A.

PRIMEVAL man. *See* **Argyle,** *Duke* of.

——— arts in domestic life. The spoon, etc. *See* **Westman,** Habakkuk O.

Prince, Alexander. Law and practice of patents, and registrations of designs. *See* **Billing,** S.

——— The record of patent inventions. v. 1. 8°. *London,* 1843.

Prince, David. Orthopedics, a treatise upon the prevention and correction of deformities. 8°. *Philadelphia,* 1866.

PRINCIPIA, Chapman's; or nature's first principles. *See* **Chapman,** L. L.

——— Newton's. *See* **Newton,** *Sir* Isaac.

——— philosophiæ. *See* **Descartes,** Renatus.

PRINCIPLES of science. *See* **Jevons,** W Stanley.

Pringle, R. O., **Murray,** —, and others. Practical farming; in a series of treatises. Crops. 12°. *Edinburgh and London, n. d.*

Printer (The), a monthly newspaper devoted to the interests of the 'art preservative of all arts.' Nos. 1–12 [in 1 v.], 1858–59. fol. *New York,* 1859.

PRINTING. Abridgments English Patents, No. 13.

——— *See* **History** of the processes of manufacture, etc. [†]

——— American encyclopædia of. *See* **Ringwalt,** J. Luther.

——— The American printer. *See* **Mackellar,** Thomas.

——— and book-making. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 13.**

——— Die Anfänge der Druckerkunst. *See* **Collectio** Weigoliana.

——— Art of anastatic. *See* **Cowell,** S. H.

——— Art of; its history and practice from

Digitized by Google

PRINTING—Continued.
the days of John Guttenberg. *See* **Hansard**, T. C.
——— Buchdruck, von Ludwig Lott. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**
——— calico. **Abridgments English Patents, No. 14.**
——— clubs of the United Kingdom. *See* **Hume**, A.
——— Détails sur les produits de l'imprimerie impériale de France. *See* **Escodeca de Boisse.**
——— Dictionary of the art of. *See* **Savage**, W.
——— Die Entdeckung des Naturselbstdruckes. *See* **Auer**, A.
——— Erfindung der Buchdruckerkunst. *See* **Schaab**, K. A.
——— Geschichte der Hof- und Staatsdruckerei in Wien. *See* **Geschichte.**
——— Handbuch der Buchdruckerkunst. *See* **Franke**, C. A. **220 Neuer Schauplatz der Künste.**
——— The history and art of. *See* **Luckombe**, P.
——— History of printing in America; with a biography of printers and an account of newspapers. *See* **Thomas**, J.
——— History of the art of. *See* **Humphreys**, H. Noel.
——— in Portugal. Breve noticia da imprensa nacional. *See* PORTUGAL. **Imprensa** nacional.
——— ink, Preparation of. *See* **Savage**, M.
——— Journal für Buchdruckerkunst u. s. w. *See* **Journal.**
——— machine. Drawings of the patent polytint. *See* **Gover**, Henry Charles.
——— machines, A catalogue of. *See* Hoe, R., and co.
——— Manual of. *See* **Timperly**, C. H.
——— National printing office in Lisbon. *See* LISBON.
——— Nature printing; its origin and objects. *See* **Bradbury**, N.
——— Naturselbstdruck: sein Ursprung und Zweck. *See* **Bradbury**, N.
——— Das Neueste in der Druck- und Färbekunst. *See* **Kurrer**, W. H.
——— L'origine de l'imprimerie. *See* **Lambinet**, P.
——— L'origine de l'imprimerie en Europe. *See* **Bernard**, A. J.
——— L'origine de l'imprimerie en Europe. *See* **Loosey**, C. F.
PRINTING. Report on governmental printing institutions in Europe. By A. H. Brown. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**
——— Report on the art of. By G. W Silcox. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**
——— societies and clubs, London catalogue of metropolitan. *See* LONDON.
——— Specimens of types. *See* Fry, Edmund.
——— Specimens of types and ornaments. *See* Conner, J., and sons.
PRINTS. Fabrication des tissus imprimées. *See* **Kæppelin**, D.
——— Traité de l'impression des tissus. *See* **Persoz**, J. F.
Prior, R. C. A. On the popular names of British plants; an explanation of the origin and meaning of the names of our indigenous and most commonly cultivated species. 12°. *London*, 1863.
PRISONS. Report of the inspectors of state prisons. *See* NEW YORK (state).
Pritchard, Andrew. Description of optical instruments. *See* LONDON. **Society of useful knowledge, v. 2.**
——— History of infusoria, including the desmidiaceæ and diatomaceæ, British and foreign. 4th ed. enlarged by J. T. Arlidge, W. Archer, J. Ralfs, W. C. Williamson, and Andrew Pritchard. *Illus.* 8°. *London*, 1861.
——— History of infusoria living and fossil; arranged according to the Infusionsthierchen of C. H. Ehrenberg; with an appendix containing an account of those recently discovered in chalk formations. 2d ed. 8°. *London*, 1849.
——— List of patents in England, for inventions in the arts, manufactures, etc., granted during the present century, including those now in force. 12°. *London*, 1841.
——— Microscopic illustrations of living objects, with researches concerning the methods of constructing microscopes, and instructions for using them. To which is added a supplement on the verification of microscopic phenomena, and an exact method of testing microscopes. By C. R. Goring. 3d ed. 8°. *London*, 1845.
——— Optical instruments, published by the Society for the diffusion of useful knowledge. 8°. *London. n. t. p.* pp. 60. [Bound in a volume entitled 'Tracts'.]

Digitized by Google

Pritchard, Andrew. A practical treatise on optical instruments. 8°. *London*, 1850.

PROBABILITIES, Essay on; and on their application to life contingencies and insurance offices. *See* **De Morgan,** A. **Lardner's cabinet cyclopædia, v. 110.**

——— Theory of; as applied to the moral and political sciences. *See* **Quetelet,** M. A.

——— Traité élémentaire du calcul des probabilités. *See* **Lacroix,** S F.

PROCEEDINGS of societies, etc. *See* **Transactions.**

Procter, William, *jr.* American journal of pharmacy; ed. by. *See* **American.**

——— Practical pharmacy; ed. by. *See* **Mohr,** F., and **Redwood,** F.

Proctor, Richard A. Light science for leisure hours; essays on scientific subjects, natural phenomena, etc. 12°. *New York*, 1871.

——— The stars; in twelve maps, on the gnomonic projection. *Illus.* fol. *London*, 1866.

PRODUCTS, Animal and vegetable. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 4.**

——— Fish and fishing. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 5.**

PROFESSIONAL ethics. *See* **Sharswood,** George.

PROFESSIONS, Industrial. Annales de l'industrie: mémoire sur les métiers. *See* **Le Normand,** L. S., and **Moleon,** J. G. v. de.

Programa de matemáticas, para el estudio de esta asignatura en los institutos de segunda enseñanza. Aritmética y álgebra. Geometría, trigonometría y nociones de topografía. Nueva edicion. 8°. *Madrid*, 1875.

Progress of machinery and manufactures in Great Britain, as exhibited chiefly in chronological notices of some letters patent granted for inventions and improvements from the earliest times to the reign of Queen Anne. 4°. *London*, 1846.

——— of nations. *See* **Seaman,** Ezra.

PROJECTILES and rifled cannon, Report on. *See* **Butler,** John G.

——— La déviation des projectiles dans l'air. *See* **Magnus,** G.

——— Doctrine of projectiles in a non-resisting medium. *See* **Burrow,** R.

——— Expériences sur des projectiles creux. *See* **Expériences.**

PROJECTILES, Indexes to specifications of inventions in. *See* GREAT BRITAIN. **Great seal patent office.**

——— Laws of. *See* **Busk,** H. Handbook for Hythe.

——— Mouvement des projectiles lancés par les armes à feu rayées. *See* **Saint-Robert,** P. de.

PROJECTION. Anleitung zum axonometrischen Zeichnen. *See* **Weisbach,** Julius.

——— Principles and practice of isometrical. *See* **Heather,** J. F. **Weale's series Nos. 76, 77.**

Prony, R. Nouvelle architecture hydraulique. 1–2 partie. 4°. *Paris*, 1790–96.

PROPELLERS. Abridgments English Patents, No. 5.

——— History of. *See* **Macfarlane,** R.

——— Lessons and notes on. *See* **King,** W. H.

——— The progressive screw as a propeller. *See* **Revy,** J. J.

——— Propulseur à pression atmosphérique *See* **Vallet,** Lucien.

——— The screw propeller *See* **Portwine,** E.

——— Submarine propeller. By E. Galloway. *See* **Tredgold,** T. Steam navigation, app. D.

——— Treatise on screw. *See* **Nystrom,** J. W.

——— Treatise on the screw propeller. *See* **Bourne,** J.

PROPERTY, Exclusive. Code de la propriété industrielle, littéraire et artistique. *See* **Blanc,** E., and **Beaume,** A.

PROPERTIES of continuous bridges. By Charles Bender. **Van Nostrand's science series, No. 26.**

PROPORTION, Rules of. *See* **Atwood,** D. T.

Proportions (Les) du corps humain; mesurées sur les plus belles figures de l'antiquité. fol. *Paris*, 1683.

——— of pins used in bridges. *See* **Bender,** Charles. **Van Nostrand's science series, No. 4.**

Prosser, Richard. Abstract of law of patents, 1852. *See* GREAT BRITAIN.

——— Patent law amendment act, 1852. Suggestions as to the form of printing the past and future specifications for letters patent for inventions. 8°. *Birmingham*, 1852.

Digitized by Google

Proteaux, A. A practical guide to the manufactures of paper and boards. Additions by L. L. Le Normand. Transl. from the French, with notes by Horatio Paine; to which is added a chapter on the manufacture of paper from wood, in the United States. 8°. *Philadelphia,* 1866.

PROTECTION from fire and thieves. *See* **Chubb,** George Hayter.

PROTECTIVE policy, Sophisms of the. *See* **Bastiat,** Fr. [†]

PROTEIN compounds. Chemie und Physiologie der Proteinsubstanzen. *See* **Sachsse,** Robert.

PROTHESIS, Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 24.**

PROTOPLASM, As regards; in relation to Huxley's essay on the physical basis of life. *See* **Stirling,** James Hutchison. **University series, No. 3.**

PROVIDENCE (R. I.). Brown university. Catalogue of the library, with an index of subjects. Compiled by C. C. Jewett. 8°. *Providence,* 1843.

——— Directory for 1866–69. 8°. *Providence,* 1866–69.

——— Meteorological observations at Providence, 1831–60, made by A Caswell. **Smiths'n contrib, v. 12.**

——— Providence athenæum. Annual reports, 20th–28th, of the directors, to the proprietors. 8°. *Providence,* 1855–60.

PROVINCIALISMS, Dictionary of. *See* **Wright,** Thomas.

PRUSSIA. Analysis of the organization of the Prussian army. *See* **Talbot,** G. F.

——— Der Boden und die landwirthschaftlichen Verhältnisse des preussischen Staates. *See* BERLIN.

——— Königl. Landes-Oekonomie-Collegium. Annalen der Landwirthschaft in den königlich-preussischen Staaten. Wochen-Blatt. B. 1–8. Jahrg. 1863–70. fol. *Berlin,* 1863–70.

——— Königl. Ministerium für Handel, Gewerbe und öffentliche Arbeiten. Repertorium der technischen Literatur die Jahre 1823 bis einschl. 1853 umfassend. Bearbeitet von Schubarth. 8°. *Berlin,* 1856. N. F., von Kerl; 1854–68, 2 Bde., *Leipzig,* 1871–73; 1869–73, 2 Bde., *Leipzig,* 1876–; Jhrg. 1874–76, *Leipzig,* 1875–77——.

——— ——— Zeitschrift für das Berg-Hütten- und Salinenwesen in dem preussischen Staate. Hrsg. von R. von Carnall. B. 1–17. 4°. *Berlin,* 1854–70.

——— Königliches Revisions-Kollegium für Landeskultur-Sachen. Zeitschrift für die Landeskultur-Gesetzgebung der preussischen Staaten. B. 10–13, 1857–61. [B. 11, 1858, missing.] 8°. *Berlin,* 1857–61.

——— Law of copyright, 1837. *See* **Law** reporter.

——— Statistisches Bureau zu Berlin. Tabellen und amtliche Nachrichten über den preussischen Staat für die Jahre 1849–55. B. 1–6. fol. *Berlin,* 1851–55.

——— ——— Zeitschrift des königlich-preussischen statistischen Bureaus. Redigirt von dessen Director E. Engel. Jahrg. 6–14. fol. *Berlin,* 1866–74.

——— Verhandlungen des Vereins zur Beförderung des Gewerbfleisses in Preussen. *See* BERLIN.

——— Zeichnungen der preussischen Feld-Artillerie. *See* **Kameke,** H. F.

Prussian Rhenish provinces. Naturhistorischer Verein der preussischen Rheinlande und Westphalens. Verhandlungen. Hrsg. von C. O. Weber. Jahrg. 13–32. 8°. *Bonn,* 1856–75——.

PRUSSIATE of potash and Prussian blue. Fabrikation des blausauren Kalis und Berlinerblaus. *See* **Rösling,** C. W. **86 Neuer Schauplatz der Künste.**

Psychological (The) and medico-legal journal; a monthly review of diseases of the mind and nervous system, and of medical jurisprudence. Assisted by T. M. B. Cross. [Continued under the name of the American psychological journal, conducted by Allen McLane Hamilton and others.] v. 1–2, 1874–75. 8°. *New York,* 1874–75——.

——— medicine, The quarterly journal of. *See* **Quarterly** journal.

PSYCHOLOGY. Mental philosophy. *See* **Haven,** Joseph.

——— Mental science. *See* **Bain,** Alexander.

——— Rational. *See* **Hickok,** Laurens P.

——— Study of comparative. *See* **Samuelson,** J. Honey bee.

Ptolemy, Claudius. The quadripartite; or, four books concerning the influences of the stars; first written in Greek, by Ptolemy. With notes, by John Whalley. 2d ed. 18°. *London,* 1786.

Pubetz, Anton. Uebersichtliche Darstellung der aus dem Steinkohlentheer

Digitized by Google

Pubetz, Anton—Continued.
erzeugten und abgeleiteten Farbstoffe. 12°. *Berlin*, 1870. pp. 32.

PUBLIC buildings. Architektur und öffentliche Bauten. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 14.**

——— debt of the United States. *See* **Gibbons,** J. S.

——— libraries in the United States of America. *See* UNITED STATES. **Interior** dept. Bureau of education.

——— libraries, Report from the select committee on. *See* GREAT BRITAIN.

——— records, Report of the keeper of the. *See* GREAT BRITAIN.

——— works. Annales des travaux publics. *See* BELGIUM.

——— ——— Report on. By W. Watson. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 3.**

——— ——— Travaux publics des États Unis d'Amérique en 1870. *See* **Malézieux,** M.

Publication industrielle des machines, outils et appareils. *See* **Armengaud,** M., *aîné.*

Publishers and stationers' weekly trade circular, a journal devoted to the interests of the publishing, printing, book, stationery, news, music, art, and fancy trades, and associated branches. With which is incorporated the American publishers' circular and literary gazette, established in 1852. v. 1-11. 8°. *New York*, 1872-77——.

Publishers' circular and general record of British and foreign literature; containing a complete alphabetical list of all new works published in Great Britain, and every work of interest published abroad; advertisements connected with literature and the fine arts; to which is annexed, a complete alphabetical catalogue of the new works and new editions. v. 1-40. 8°. *London*, 1837-77——.

PUDDLING of iron and steel. *See* **Urbin,** E.

Puffer, A. D., Catalogue of Puffer's frigid soda mineral water apparatus; secured by numerous patents, and manufactured by. 8°. *Boston*, 1877.

Pugh, —. Queensland almanac, law calendar, directory, and coast guide, for 1876; being bissextile, or leap year. 18th year of publication. 16°. *Brisbane, Queensland*, 1876.

Pugh—Continued.

Pugin, Augustus. Architectural antiquities of Normandy. *See* **Britton,** J.

——— and **Britton,** John. Illustrations of the public buildings of London: with historical and descriptive accounts of each edifice. 2d ed. enlarged by W. H. Leeds. 2 v. 8°. *London*, 1838.

Pugin, A. H. Welby. Designs for gold and silver smiths. 4°. *London*, 1836.

——— Designs for iron and brass work in the style of 15th and 16th centuries. *Illus.* 4°. *London*, 1836.

——— Details of antient timber houses of the 15th and 16th centuries; selected from those existing at Rouen, Caen, Beauvais, Gisors, Abbeville, Strasbourg, etc.; drawn on the spot. *Illus.* 4°. *London*, 1836.

——— Gothic furniture in the style of the 15th century. *Illus.* 4°. *London*, 1835.

——— Recollections of, and of his father, Augustus Pugin; with notices of their works. *See* **Ferrey,** Benjamin.

PULASKI, Fort, Report of the siege and reduction of. By Q. A. Gillmore. *See* UNITED STATES. **War** dept. Bureau of eng's.

Pullan, Matilda. The lady's manual of fancy-work: a complete instructor in every variety of ornamental needle-work. *Illus.* 12°. *New York*, 1859.

Pulleyn, William. The portfolio of origins and inventions; being an etymological compendium, relating to language, literature, and government. Revised by Merton A. Thoms. 8°. *London*, 1861.

Pulszky, Francis. Indigenous races of the earth. Contributions by. *See* **Nott,** J. C., and **Gliddon,** George R.

Pumpelly, Raphael. Across America and Asia; notes of a five years' journey around the world and a residence in Arizona, Japan and China. 8°. *New York*, 1870.

PUMPS and fire engines. Pumpen und Feuerlöschapparate. F. Mannlicher. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 21.**

——— and water engines. Spritzen und Pumpen. Von Peter Zwiauer. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Digitized by Google

PUMPS. Der Bau der Pumpen und Spritzen. *See* **Jeep**, W.

——— centrifugal, Decision on the application of W. D. Andrews, for an extension of patent for. *See* **Thomas**, P. F.

——— Centrifugal-Pumpen. *See* **Rittinger**, P.

——— Konstruktion der Pumpen. *See* **Hoelder**, Georg. **280 Neuer Schauplatz der Künste.**

——— Die Pumpen. Eine Darstellung ihrer Theorie, Konstruktion und Wirkungsweise. *See* **König**, Friedrich.

——— Treatise on pump-work. *See* **Swindell**, J. G. **Weale's series, No. 31.**

Punch and Judy; designed and engraved by George Cruikshank. *Illus.* 5th ed. 12°. *London*, 1870. [† ?]

PUNCTUATION, A treatise on English. *See* **Wilson**, John.

Pursch, Frederick. Flora Americae Septentrionalis; or a systematic arrangement and description of the plants of North America; containing besides what have been described by preceding authors, many new and rare species. 2d ed. 2 v. 8°. *London*, 1816.

Putnam, *Mrs.* E. Receipt book, and young housekeeper's assistant. 12°. *Boston*, 1849.

Putnam, George P. The book buyer's manual; a catalogue of foreign and American books, in every department of literature. With classified index. 8°. *New York*, 1852.

Puymaurin, — de. Instruction sur l'art d'extraire l'indigo contenu dans les feuilles du pastel. 8°. *Paris*, 1813. pp. 42.

——— Mémoire sur un nouveau rouleau à battre le blé. 8°. *Toulouse*. pp. 15.

PUZZOLANAS, Observations on natural and artificial. *See* **Pasley**, C. M.

Pyne, George. A rudimentary and practical treatise on perspective. 3d ed. *Illus.* 12°. *London*, 1851. **Weale's series, Nos. 20, 21.**

PYRITES, Pyritologia, or a history of. *See* **Henckel**, J. F.

PYROMETER, Treatise on the, by T. S. Traill. *See* LONDON. **Society of useful knowledge, v. 2.**

PYROTECHNY. Chimie pyrotechnique ou traité pratique des feux colorés. *See* **Tessier**, P.

PYROTECHNY. Lustfeuerwerkerei. *See* **Büttner**, F. C. A., and **Chertier**, F. M. **92 Neuer Schauplatz der Künste.**

——— La pyrotechnie, ou l'art du feu. *See* **Biringuccio**, Vanoccio.

——— Recherches sur les feux d'artifice. *See* **Chertier**, F. M.

——— A system of, comprehending theory and practice, with the application of chemistry. *See* **Cutbush**, J.

——— A system of recreative fire-works. *See* **Mortimer**, G. W.

Quackenbos, G. P. A natural philosophy; embracing the most recent discoveries in the various branches of physics, and exhibiting the application of scientific principles in every-day life. 12°. *Memphis, Tenn.*, 1860.

——— Spiers and Surenne's French and English dictionary, rev. by. *See* **Spiers**, A.

QUACKERY and imposture in medicine. *See* **Ticknor**, Caleb.

QUADRANT, Description and use of the triangular. *See* **Brown**, John.

QUADRATURE of the circle. *See* **Parker**, John A.

QUADRUPEDS, The great extinct. By J. Martin Duncan. *See* **Science lectures for the people, series 7.**

——— Natural history and classification of. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 117, 118.**

Quain, Jones. Human anatomy; edited by Richard Quain and William Sharpey. 1st American from 5th London ed'n, ed. by Joseph Leidy. 2 v. 8°. *Philadelphia*, 1849.

QUALITATIVE analysis. Tabellen zur qualitativen Analyse. *See* **Classen**, Alexander.

QUANTITATIVE chemical analysis. Tabulae atomicae. *See* **Rose**, Heinrich.

Quantrill, Thomas H. The mechanic's calculator and tinman's guide; comprehending principles, rules and tables, to which are added a great variety of receipts; also, the composition of all the useful alloys. *Illus.* 8°. *Washington*, 1847. pp. 24.

QUARANTINE. Report relative to the removal of the station. *See* NEW YORK (city).

Quaritch, Bernard. A catalogue of books, arranged in classes; comprising all departments of literature. 8°. *London*, 1864.

Digitized by Google

QUARRYING processes and products. By H. T. De La Beche. *See* **Lectures** on results of the exhibition.

—— stone for building and other purposes. *See* **Burgoyne, J. Weale's series, No. 35.**

Quarterly journal of agriculture, mechanics, and manufactures. v. 1, Oct.-Dec., 1834. 8°. *New York*, 1834.

—— journal of microscopical science; ed. by Edwin Lankester and George Busk. [The Quarterly journal and the Transactions of the Microscopical society were published together up to 1868.] v. 1–8, 1853–60. New series, v. 1–16, 1861–76. 8°. *London*, 1853–76——.

—— (The) journal of psychological medicine and medical jurisprudence. Ed. by W. A. Hammond. v. 1–6, 1867–72. 8°. *New York*, 1867–72. [Continued as 'Psychological and medico-legal journal', etc.]

—— journal of science; ed. by James Samuelson and William Crookes. 1st series, v. 1–7, 1864–70. New series, v. 1–6, 1871–76. 8°. *London*, 1864-76——.

—— journal of science, literature and art. v. 1–22, 1816–26. New series, v. 1–7, 1827–30. [v. 1–6 are called 'Journal of science and the arts'; v. 7, 'of literature, science, and the arts'; v. 8–22, 'of science, literature and the arts'.] 8°. *London*, 1817–30.

—— journal of the Chemical society of London. *See* LONDON. **Chemical society.**

QUARTERMASTER-general. Report to the secretary, 1877. *See* UNITED STATES. **War dept.** Q. M. general's office.

QUATERNIONS, A treatise on.. *See* **Tait, P. G.**

QUEBEC. Literary and historical society. Transactions of the sessions of 1869–72. New series, parts 7–9. 8°. *Quebec*, 1870–72.

QUEEN'S ware manufacture. Die Kunst weisses Steingut anzufertigen. *See* **Bastenaire-Daudenart. 56 Neuer Schauplatz der Künste.**

—— —— —— Die Kunst weisses Steingut anzufertigen. *See* **Schumann, L. F. 75 Neuer Schauplatz der Künste.**

QUEENSLAND. Almanac for 1876. Pugh's. *See* **Pugh, ——.**

Quekett, John. A practical treatise on the use of the microscope, including the different methods of preparing and examining animal, vegetable and mineral structures. *Illus.* 2d ed. 8°. *London*, 1852. **Library of illustrated standard scientific works, v. 6**

—— Practisches Handbuch der Mikroskopie. Mit anderweitigen guten Hülfsmitteln deutsch bearbeitet von Carl Hartmann. *Illus.* 8°. *Weimar*, 1850. **180 Neuer Schauplatz der Künste.**

Quellen zur Geschichte der Feuerwaffen. Facsimilierte Nachbildungen alter Originalzeichnungen, Miniaturen, Holzschnitte und Kupferstiche, nebst Aufnahmen alter Originalwaffen und Modelle. Hrsg. vom Germanischen Museum. 4°. *Leipzig*, 1877.

Quérard, J. M. La France littéraire; ou dictionnaire bibliographique des savans, historiens et gens de lettres de la France; ainsi que des littérateurs étrangers qui ont écrit en français, plus particulièrement pendant les 18e et 19e siècles. T. 1–12, 1827–64. [T. 11 and 12 are supplementary, the alphabet concluding with T. 10. T. 12 is entitled 'dix-neuvième siècle, tome 2me'.] 8°. *Paris*, 1827–64.

QUERIES. *See* **Notes** and queries.

Quesada, T. G. Glossary of terms applicable to marine engines and boilers, with French and Spanish translations, by. *See* **Tredgold, T. Steam engine, v. 3.**

QUESTIONS and answers on law. *See* **Kinne, Asa.**

Quetelet, A. Positions de physique. 2e éd. 3 v. 24°. *Bruxelles*, 1834.

—— Letters addressed to the Grand Duke of Saxe Coburg and Gotha, on the theory of probabilities as applied to the moral and political sciences. Transl. from the French, by Olinthus Gregory Downes. 8°. *London*, 1849.

Quin, Charles W. The wonders of optics. By F. Marion. Transl. from the French and ed. by. *See* **Marion, F. Illustrated library of wonders, v. 5.**

Quinby, M. Mysteries of bee-keeping explained: a complete analysis of the subject, containing directions for using the

Digitized by Google

Quinby, M.—Continued.
movable combs of L. L. Langstroth. 12°. *New York*, 1862.

Quincy, Josiah. The journals of Samuel Shaw, the first American consul at Canton; with a life of the author, by. 8°. *Boston*, 1847.

Quinton, J. Richard. Dental anæsthesia; painless tooth extraction, by congelation. 4th ed. 12°. *London*, 1856.

QUOTATIONS, New dictionary of. *See* **New** dictionary.

——— Riley's dictionary of Latin and Greek quotations. *See* **Riley,** H. T.

R., J. L. La laiterie, art de traiter le laitage, de faire le beurre, et de fabriquer les diverses sortes de fromages. 2e éd. revue par M***. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 19.**

RABBITS, Angora. Kaninchen- und Seidenhasenzucht. *See* **Stegmaier,** Franz Joseph.

——— Éleveur du lapin domestique. *See* **Millet-Robinet,** *Mme.* Cora.

——— How to cook. By G. Hill. *See* **Household manuals, v. 1.**

——— The rabbit fancier. A treatise on the breeding, feeding and general management of. *See* **Bement,** C. N.

Rabe, Alexander. Die Schmiermittel und Schmiervorrichtungen der Dampfmaschinen und mechanischen Getriebe. hrsg. v. 12°. *Kattowitz*, 1863.

Rabenhorst, L. Die Süsswasser-Diatomaceen (Bacillarien). Für Freunde der Mikroskopie. 4°. *Leipzig*, 1853.

RACES, Human. Degrees of relationship among nations. By L. H. Morgan. **Smiths'n misc. coll., v. 2.**

——— Indigenous races of the earth. *See* **Nott,** J. C., and **Gliddon,** George R.

——— of man, and their geographical distribution. *See* **Peschel,** Oscar.

——— of man and their geographical distribution. *See* **Pickering,** Charles.

——— of men, Lecture on. By J. R. Smith. *See* **Lyell,** Charles. **Lectures** on geology.

——— Varieties of the human race. By R. G. Latham. *See* **Bushnan,** J. S., and others. **Orr's circle of the sciences, v. 1.**

Racey, William Henry. Argument and testimony in the matter of the cross opposition of Keravenan and Racey. *See* **Serrell,** L. W.

Racinet, A. Polychromatic ornament; one hundred plates in gold, silver and colors; comprising upwards of two thousand specimens of the various styles of ancient, oriental and mediæval art; with explanatory text, and a general introduction. Transl. from the French of. fol. *London*, 1873.

Radcliffe, A. G. Schools and masters of painting: with an appendix on the principal galleries in Europe. *Illus.* 8°. *New York*, 1876.

RADIANT heat. *See* **Tyndall,** John.

RADIATION. *See* **Tyndall,** John.

Radinger. Dampfkessel. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 10.**

Radinger, Johann Friedrich. Dampfkessel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

——— Dampfmaschinen mit hoher Kolbengeschwindigkeit. 8°. *Wien*, 1872.

——— Motoren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Radouan, J. Nouveau manuel complet, théorique et pratique, des propriétaires d'abeilles: suivi de l'art d'élever et de soigner les vers à soie, et de cultiver le mûrier, par M. Morin. 3e éd. 18°. *Paris*, 1828. **90 Manuels Roret.**

Rae, Julio H. Rae's Philadelphia pictorial directory and panoramic advertiser, Chestnut street, from Second to Tenth streets. 4°. *Philadelphia*, 1851.

Rafinesque, C. S. Life of travels and researches in North America and South Europe. 16°. *Philadelphia*, 1836.

——— Medical flora, or manual of the medical botany of the United States of North America. 2 v. 12°. *Philadelphia*, 1828.

——— The new flora and botany of North America; being a supplemental flora to various floras and botanical works of Michaux, Muhlenberg, Pursh, Nuttall, Elliot, Torrey, Beck, Eaton, Bigelow, Barton, Robin, Hooker, Riddell, Darlington, Schweinitz, Gibbs, etc. 1st part, introductory lexicon, etc. 12°. *Philadelphia*, 1836.

Rafter, George W. Mechanics of ventilation. 18°. *New York*, 1878. **Van Nostrand's science series, No. 33.**

Digitized by Google

RAILROAD. *See, also,* **Railway.**

—— accidents. La cause du déraillement des wagons sur les courbes des chemins de fer. *See* **Olivier,** T.

—— —— L'électricité et les chemins de fer; description et examen de tous les systèmes proposés pour éviter les accidents sur les chemins de fer, au moyen de l'électricité, etc. *See* **Castro,** M. T. de.

—— —— Mécanisme destiné à prévenir les accidents sur les chemins de fer. *See* **Roubier,** B.

—— —— Reports on a series of accidents and detentions on the Great Western railway. *See* CANADA.

—— —— their causes, and the means of preventing them. *See* **With,** E.

—— Baltimore and Ohio. Reports of the president and directors *See* BALTIMORE.

—— brakes, safety rail and stopping apparatus. *See* **Wachter,** J. P., *jr.*

—— bridges. Die Fundirung der Eisenbahnbrücke über den Pregel in Königsberg. *See* **Loeffler.**

—— —— viaducts, tunnels, culverts, etc., of the United States, Specimens of. *See* **Duggan,** G.

—— cars. Construction der Eisenbahnwaggons. *See* **Beckmann,** L. **65 Neuer Schauplatz der Künste.**

—— —— Argument of W. Whiting: Winans vs. Eaton et al., for infringement of his patent for the eight-wheel railroad car. *See* **Whiting,** W.

—— —— Arguments of W. W. Hubbell; Winans vs. Eaton et al. for infringement of patent, for the eight-wheel railroad car. *See* **Hubbell,** W. W.

—— —— Eisenbahn-Wagen für die kaiserlich russischen Eisenbahnen Odessa-Kiew. *See* **Pflug,** F. A.

—— —— Versuche mit Eisenbahn-Wagen-Achsen. *See* **Dihm.**

—— Charleston and Savannah. Report of the president. *See* CHARLESTON.

—— construction and management. *See* **Jervis,** J. B.

—— —— and vehicles used. *See* **Adams,** W. B.

—— —— Eiserne Eisenbahn. *See* **Heusinger von Waldegg,** Edmund.

—— —— Handbook of. *See* **Vose,** G. L.

—— —— Manuel du constructeur de chemins de fer. *See* **Biot,** E. **84 Manuels Roret.**

RAILROAD construction. Praxis des Baues und Betriebes der Secundärbahnen. *See* **Weber,** M. M. von.

—— —— Report on the construction of several of the principal roads in the northern and middle states, etc. *See* **Knight,** J., and **Latrobe,** J. H.

—— —— A system of useful formulæ, adapted to location and. *See* **Borden,** Simeon.

—— —— Tools and machines used in. *See* **Cole,** G.

—— —— Vorträge über Eisenbahnbau. *See* **Winkler,** E.

—— engineering. *See* **Railway** engineering.

—— journal, American. *See* **American.**

—— material. Fabrication, Prüfung und Uebernahme von Eisenbahn-Material. *See* **Petzholdt,** Alphons.

—— —— Materielle Mittel zum Betriebe der Eisenbahn über den Sömmering. *See* **Schmid,** A. von.

—— Nashville and Northwestern, Report on the affairs of. *See* NASHVILLE.

—— New Jersey, and transportation company, Report of the directors of the. *See* **Jackson,** J. P.

—— Pennsylvania. Report of the directors. *See* **Pennsylvania** railroad company.

—— rails and supports. Recherches sur les rails et leurs supports. *See* **Barlow,** P., and **Wood,** N.

—— signals. Das Telegraphen- und Signalwesen der Eisenbahnen. *See* **Weber,** M. M. v.

—— statistics in the state of New York. *See* NEW YORK (state).

—— structures. Report on. By L. Bridges. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 4.**

—— Survey of the Illinois southern. *See* **Jennings,** C.

—— to the Pacific ocean, Reports of surveys for. *See* UNITED STATES.

RAILROADS. *See, also,* **Railways.**

—— and canals of the United States, History of; exhibiting their progress, cost, revenue, etc. *See* **Poor,** Henry V.

—— and interior communication in general. *See* **Wood,** N.

—— and tunneling. Eisenbahn-Unter- und Oberbau. Von Franz Ržiha. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 18.**

Digitized by Google

RAILROADS. Anlegung und Ausführung aller Arten von Eisenbahnen. *See* **Biot,** Edmond. **76 Neuer Schauplatz der Künste.**

——— Chemins de fer. *See* **Laignel,** J. B.

——— Enquête sur les moyens d'assurer la régularité et la sûreté de l'exploitation sur les chemins de fer. *See* FRANCE.

——— Handbuch des Eisenbahnwesens. *See* **Ritchie,** R. **152 Neuer Schauplatz der Künste.**

——— in Austria. Eisenbahnen der österreichisch-ungarischen Monarchie, und ihr Betrieb. 1868-69. *See* AUSTRIA. **K. K. Statist.** Central-Commission.

——— in Belgium. Chemins de fer en Belgique. Compte rendu des opérations. *See* BELGIUM. **Travaux** publics.

——— in Germany. Chemins de fer d'Allemagne. *See* **Le Chatelier.**

——— in Germany. Verein der deutschen Eisenbahn-Verwaltungen. *See* LEIPSIC.

——— in New York, Reports on. *See* NEW YORK (state).

——— in North America. Eisenbahnwesen in Nord-Amerika. *See* **Henz.**

——— in Tennessee, Report on the condition of the. *See* **Payne,** R. G.

——— in the United States. Das Eisenbahnwesen in den Vereinigten Staaten. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 13.**

——— in the United States, The influence of. *See* **Poor,** Henry V.

——— in the United States. Innere Communicationen der Vereinigten Staaten. *See* **Gerstner,** F. A. von.

——— in the United States. Voies de communication aux États-Unis. *See* **Chevalier,** M.

——— Narrow gauge. Stimmen über schmalspurige Eisenbahnen. *See* **Nördling,** Wilhelm v.

——— Political economy of. *See* **Fairbairn,** H.

——— Progress of. Organ für die Fortschritte des Eisenbahnwesens. *See* **Organ.**

——— Traité des chemins de fer. *See* **Perdonnet,** A. A.

——— Travaux de chemins de fer. *See* **Castor,** A.

——— Treatise on. *See* **Tredgold,** T.

RAILWAY apparatus. *See* PHILADELPHIA. **International exhib. 1876, Group 18.**

——— carriages. **Abridgments English Patents, No. 46.**

——— ——— Ventilation of. *See* **Ruttan,** H. **Ventilation** and warming of buildings.

——— curves and tangents. *See* **Mifflin,** Samuel W.

——— directory, for 1858. *See* **Low,** James W., *jr.*

——— economy. A treatise on the new art of transport. *See* **Lardner,** D.

——— engineer, The practical. *See* **Dempsey,** G. Drysdale.

——— engineering: field work preparatory to the construction of. *See* **Baker,** T.

——— ——— Constructionen aus dem Gebiete des Eisenbahnbaues. *See* CARLSRUHE.

——— ——— Handbuch für specielle Eisenbahn-Technik. *See* **Heusinger von Waldegg,** Edmund.

——— ——— Practische Anleitung zum Traciren der Eisenbahnen. *See* **Stummer,** Joseph.

——— ——— Projet d'un chemin de fer de Lyon à Marseille. *See* FRANCE. **Ministère des travaux publics, etc.**

——— ——— Projet d'un chemin de fer de Paris à Orléans. *See* FRANCE. **Ministère des travaux publics, etc.**

——— ——— Projet d'un chemin de fer de Paris à Rouen, au Havre et à Dieppe. *See* FRANCE. **Ministère** des travaux publics, etc.

——— ——— Rapport sur le frein automoteur de M. Guérin. *See* **Piobert, Combes,** Charles, and **Couche,** Ch.

——— ——— Le tracé des chemins de fer de Paris en Belgique et en Angleterre, et d'Angleterre en Belgique. *See* FRANCE. **Ministère des travaux publics, etc.**

——— ——— Die Tragfähigkeit verschiedener Eisenbahnschienen. *See* **Weishaupt,** T.

——— ——— Verhandlungen des Vereins für Eisenbahnkunde. *See* BERLIN.

——— ——— Vorlegeblätter zur Eisenbahn-Baukunde. *See* **Bauernfeind,** C. M.

——— Grand Trunk. Statements, etc., of the. *See* CANADA.

——— guide, Assistant engineers'. *See* **Haskoll,** W. D.

——— History of the English; its social relations and revelations. *See* **Francis,** John.

Digitized by Google

RAILWAY locomotion. *See* **Curr, J.**

——— machinery; a treatise on the mechanical engineering of. *See* **Clark**, D. K.

Railway magazine, and annals of science; containing copious accounts of all railways at home and abroad; notices of inventions and scientific discoveries, by John Herapath. New series, v. 1-6, 1836-39. [v. 6. is entitled 'The railway magazine and steam navigation journal'.] With maps. 8°. *London*, 1836-39.

——— plant. *See* PHILADELPHIA. **International exhib. 1876, Group 18**

——— practice in the economical generation of steam, etc., American and European. *See* **Holley**, A. L.

——— ——— *See* **Brees**, S. C.

——— review, American. *See* **American.**

——— signals. **Abridgments English Patents, No. 38.**

——— St. Gothard. Die Gotthardtbahn. *See* **Thommen**, A.

——— structure, Trellis; patent wrought-iron railway chairs; and improved mode of joining the ends of railway bars. *See* **Herron**, J.

——— structures. Eisenbahnbauten bei Kehl. Rhein-Brücke, Bahnhof, Kinzig, und Schutter-Brücken, etc. *See* CARLSRUHE.

——— tracks, The defects of, and their remedy. *See* **Latrobe**, B. H.

RAILWAYS. *See, also,* **Railroads.**

——— **Abridgments English Patents, No. 33.**

——— Atmospheric. L'air atmosphérique comme force motrice sur les chemins de fer. *See* **Grelle**, A. L.

——— ——— Application of atmospheric pressure to. By T. Harris. **Weale's papers on engineering, v. 4.**

——— ——— Application of the atmospheric system. By Mallet. **Weale's papers on engineering, v. 2.**

——— ——— Arago's report on. **Weale's papers on engineering, v. 3.**

——— ——— Arnollet's system of. **Weale's papers on engineering, v. 5.**

——— ——— Chemins de fer atmosphérique de Saint-Germain. *See* **Étienne**, C.

——— ——— Clegg and Samuda's. *See* **Clegg**, S., and **Samuda**, J.

——— ——— Constructing and working. By R. Mallet. **Weale's papers on engineering, v. 4.**

——— ——— Essay on the air-pump and. *See* **Turnbull**, W.

——— ——— History of. *See* **Portwine**, E.

RAILWAYS, Atmospheric. Report on. *See* **Stephenson**, R.

——— ——— Report on. By Sir J. Macneill. **Weale's papers on engineering, v. 2.**

——— ——— A sketch of the proposed systems of. *See* **Jones**, W.

——— Cases relating to. *See* **Nicholl**, T. J., and others.

——— Cases relating to the law of. *See* **Smith**, C., and **Bates**, S. W.

——— Chemins de fer, Paris, 1867; les locomotives, etc. *See* **Taillard**, Ernest.

——— Christianity and commerce the natural results of the progression of. *See* **Wright**, John.

——— Comte-rendu des opérations, 1854. *See* BELGIUM.

——— Improvements in locomotive engines and. *See* **Sellers**, G. E.

——— Introductory sketch, with suggestions in reference to their extension to British colonies. *See* **Stephenson**, Rowland M. **Weale's series, No. 62.**

——— of Great Britain and Ireland. *See* **Whishaw**, F.

——— Permanent way and coal-burning locomotive boilers of European railways. *See* **Colburn**, Z., and **Holley**, A. L.

——— Reports on. *See* **Strickland**, W.

——— Street; their location, construction and management. *See* **Easton**, Alexander.

——— their rise, progress and construction; with remarks on accidents, and proposals for prevention. *See* **Ritchie**, R.

——— Traité de la législation et la jurisprudence des chemins de fer. *See* **Rebel** and **Juge.**

——— Veranschlagen der Eisenbahnen. *See* **Plessner**, F.

RAIN. Die Regenverhältnisse des Königreichs Hannover. *See* EMDEN.

Rainey, Thomas. Ocean steam navigation, and the ocean port. 8°. *New York*, 1858.

RAISING and lowering. Personen- und Lastenaufzüge und Fördermaschinen. Von A. Riedler. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 20.**

——— lowering and weighing. **Abridgments English Patents, No. 31.**

Ralfs, J. Pritchard's history of infusoria, rev. by. *See* **Pritchard**, Andrew.

Digitized by Google

Ralph and co. Descriptive catalogue of agricultural and horticultural implements; and of machinery, field and garden seeds, fruit and ornamental trees, domestic animals, fertilizers, etc. 8°. *New York*, 1852.

Ralph, Benjamin. The school of Raphael; or, the student's guide to expression in historical painting. Illustrated by examples engraved by Duchange and others, under the inspection of Sir Nicholas Dorigny, from his own drawings after the most celebrated heads in the cartoons at the king's palace. With instructions for young students in the art of designing; and the passions, as characterized by Raphael in the cartoons, described and explained. 4°. *London*, 1825.

Ramberg, Wilhelm. Darstellung der feinen Toiletseifen, nach den bis jetzt geheim gehaltenen Verfahrungsarten, Einrichtungen, Geräthschaften und Maschinen. 8°. *Weimar*, 1858. **246 Neuer Schauplatz der Künste.**

Ramée, Daniel. L'architecture et la construction pratique; mise à la portée des gens du monde, des élèves, et de tous ceux qui veulent faire bâtir. 8°. *Paris*, 1868.

——— Dictionnaire général des termes d'architecture en français, allemand, anglais, et italien. 8°. *Paris*, 1868.

Ramesey, William. De venenis; or a discourse of poysons; their names, natures and vertues, with their several symptoms, prognostics and antidotes. 24°. *London*, 1663.

Rammelli, Agostino. Le diverse ed artificiose machine. Nelle quali si contengono varij et industriosi monimenti degni di grandissima speculatione, per cavarne beneficio infinito in ogni sorte d'operatione, composte in lingua italiana e francese. fol. *Parigi*, 1588.

Rammelsberg, C. F. Handbuch der Mineral-Chemie. 8°. *Leipzig*, 1860. 2te Aufl., 1875.

——— Lehrbuch der chemischen Metallurgie. 8°. *Berlin*, 1850.

——— Leitfaden für die quantitative chemische Analyse, besonders der Mineralien und Hüttenprodukte, durch Beispiele erläutert. 8°. *Berlin*, 1863.

——— Percy's Metallurgie des Bleies; übers. von. *See* **Percy,** John.

Ramming, Hermann. Die Spinnerei-Industrie, oder Repertorium aller in der Wollen-, Baumwollen-, Jute-, Hanf-, Flachs- und Wergspinnerei gemachten Verbesserungen, Erfindungen und Neuerungen. Zusammengestellt von. *Illus.* sm. 8°. *Weimar*, 1867. **281 Neuer Schauplatz der Künste.**

Ramon de Villalon y Hechavarría, José. Manual del apicultor. Tratado teorico-practico del arte de criar las abejas y esplotar las colmenares con aplicacion especial á la isla de Cuba. 8°. *Santiago de Cuba*, 1867.

Ramsbotham, Francis H. The principles and practice of obstetric medicine and surgery, in reference to the process of parturition. New Amer. ed., with notes, by W. V. Keating. 8°. *Philadelphia*, 1855.

Ramsey, J. G. M. The annals of Tennessee, to the end of the 18th century. 8°. *Charleston*, 1853.

Rand, B. Howard. Elements of medical chemistry. 12°. *Philadelphia*, 1867.

Rand, Edmund Sprague, *jr.* Bulbs; a treatise on hardy and tender bulbs and tubers. 12°. *Boston*, 1866.

——— Garden flowers; how to cultivate them; a treatise on the culture of hardy, ornamental trees, shrubs, annuals, herbaceous and bedding plants. 8°. *Boston*, 1866.

Randall, G. P. Supplement to a descriptive and illustrated catalogue, containing plans in perspective, of colleges, schoolhouses, churches and other public buildings; and suggestions relative to their construction, heating and ventilation. 8°. *Chicago*, 1867. pp. 14.

Randall, Henry S. Sheep husbandry in the south; a treatise on the acclimation of sheep in the southern states, and an account of the different breeds, in a series of letters. 8°. *Philadelphia*, 1848.

Rankin, Robert Richard. An analysis of the law of patents. 12° *London*, 1824.

Rankine, William John Macquorn. A manual of applied mechanics, with diagrams. 8°. *London and Glasgow*, 1858.

——— A manual of civil engineering, with diagrams. 8°. *London*, 1862.

——— A manual of machinery and millwook, with diagrams. 8°. *Lon*

Digitized by Google

Rankine, William John Macquorn. A manual of the steam engine and other prime movers, with diagrams. 8°. *London and Glasgow,* 1859.

—— Useful rules and tables relating to mensuration, engineering, structures, and machines. 4th ed. 8°. *London,* 1873.

—— and **Bamber,** E. F. A mechanical text book, or introduction to the study of mechanics and engineering. 12°. *London,* 1873.

Ranlett, William H. The architect; a series of original designs for domestic and ornamental cottages and villas, connected with landscape gardening. 2 v. 4°. *New York,* 1847–49.

Ransome, J. Allen. The implements of agriculture. 8°. *London,* 1843.

Ransomes and Sims. Catalogue illustré de máchines et instrumens. sm. 4°. *Ipswich,* 1859.

—— Fabricants de charrues, machines à vapeur, machines à battre, et autres machines et instruments agricoles. 8°. *Ipswich,* 1856. pp. 39. [2 copies.]

Rapalje, J., and co. Catalogue of agricultural and horticultural implements, machines and seeds. 8°. *Rochester,* 1851–52.

Raphael, School of. *See* **Ralph,** Benjamin.

Rapou, Augustus. A treatise on typhoid fever and its homœopathic treatment; transl. from the French, by Arthur Alleyn Granville. 12°. *New York,* 1853.

Rapou, T. Traité de la méthode fumigatoire, ou de l'emploi médical des bains et douches de vapeurs; avec planches. T. 1–2. 8°. *Paris,* 1823.

Rathet, F. Schlossermeister: Beiträge von. *See* **Grandpré,** L. M. J. O. de. **50 Neuer Schauplatz der Künste.**

Rationale divinorum officiorum. [Without title-page or name of author; date, etc., given in colophon.] fol. Anno 1470.

Rathke, Heinrich. Untersuchungen über die Arterien der Verdauungswerkzeuge der Saurier. 4°. *München,* 1861.

RATTLESNAKE, Venom of the. By S. W. Mitchell. **Smiths'n contrib., v. 12.**

Rau, Karl Heinrich. Die landwirthschaftlichen Geräthe der Londoner Ausstellung im Jahre 1851. Amtlicher Bericht mit Zusätzen. *Illus.* 8°. *Berlin,* 1853.

Rau, T. Beschreibung und Abbildung der nützbarsten Ackerwerkzeuge. Im Auftrag der königlichen Centralstelle für die

Rau, T.—Continued.

Landwirthschaft; hrsg. von. *Illus.* 4°. *Stuttgart,* 1862. pp. 40.

Rauch, F. A. Régénération de la nature végétale, ou recherches sur les moyens de recréer, dans tous les climats, les anciennes températures et l'ordre primitif des saisons, par des plantations raisonnées. T. 1–2. 8°. *Paris,* 1818.

Raucourt. A manual of lithography; to which is added selections from the works of M. Brégeaut. Transl. from the French, by C. Hullmandel. 8°. *London,* 1832.

Ravichio de Péretsdorf. Fabrication et durée des bouches à feu en fer et en bronze; trad. par. *See* **Meyer,** M.

Rawdon, Wright, Hatch, and Edson. How to detect counterfeit bank notes. 8°. *New York,* 1856.

Rawson, James. A dictionary of synonymical terms of the English language. *Philadelphia,* 1850. [†]

—— The Indian archipelago; its manners, arts, languages, religions and institutions. 2 v. [bound in one]. 24°. *New York,* 1847.

Ray, Joseph. Arithmetic. Part 3d, on the inductive and analytic methods of instruction. 16°. *Cincinnati,* 1843.

Raymond, Henry J. Lyell's lectures on geology, reported by. *See* **Lyell,** Charles.

Raymond, Rossiter W. Mineral resources of the states and territories west of the Rocky mountains. 8°. *Washington,* 1869.

RAZORS, A treatise on. *See* **Kingsbury,** Benjamin.

Read, John. The spontaneous electricity of the earth and atmosphere. 8°. *London,* 1793.

READY calculator, The merchants and shipmasters'. *See* **Goodfellow,** J.

—— reckoner. *See* **Smith,** J. C.

—— —— containing the value of articles by the pound, ounce, barrel, etc. *See* **Sweet,** I. D. J.

—— —— for freighters and shippers. *See* **Taylor,** Daniel.

REAL property. La proprietà fondiaria; e le popolazioni agricole in Lombardia. *See* **Jacini,** Stefano.

REAPING machines, Appendix to specifications of English patents for. *See* **Woodcroft,** B.

Digitized by Google

REAPING machines. Argument in opposition to the extension of McCormick's patent. *See* **Lawrence**, D. C., and **Fenwick**, R. W.

——— ——— History of. *See* **Review** of the pamphlet of Fitzgerald.

——— ——— McCormick vs. Manny and others; opinion of Justice McLean. *See* **McLean**, J.

REASON, Instinct and. *See* **Samuelson**, J. The honey-bee.

Reason (The) why. General science; a collection of reasons for things which, though generally received, are imperfectly understood. 12°. *London*, 1869.

——— ———. Natural history; illustrating the natural history of man and the lower animals. 12°. *London*, 1869.

Réaumur, René Antoine Ferchault de. L'art d'adoucir le fer fondu, par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 8 and 15.**

——— L'art de l'épinglier. PARIS. **Acad. roy des sc.; arts et métiers, v. 8 and 7.**

——— Fabrique des ancres, par. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 8 and 15.**

Rebel and **Juge.** Traité théorique et pratique de la législation et de la jurisprudence des chemins de fer, où sont expliqués les droits et les obligations des compagnies, des actionnaires et du public, ainsi que les règles relatives à la police, à la jurisdiction et à la compétence en matière de chemins de fer; suivi du règlement général sur la police des chemins de fer, du 15 novembre 1846. 8°. *Paris*, 1847.

RECEIPTS. Allgemeines chemisch-technisch-ökonomisches Recept-Lexikon. *See* **Percy**, A. R.

——— American receipt-book. *See* **Wright**, A. S.

——— Cyclopædia of practical receipts. *See* **Cooley**, A. J.

——— Druggist's receipt book; comprising a copious veterinary formulary, etc. *See* **Beasley**, H.

——— Mackenzie's ten thousand. *See* **Mackenzie's.**

——— Mechanic's. *See* **Whittaker**, Joseph.

——— More. *See* **Leslie**, *Miss.*

——— The New Bedford practical receipt-book. *See* **Mendall**, P. H.

RECEIPTS, One thousand choice. *See* **One thousand.**

——— Receipt book and young housekeeper's assistant. *See* **Putnam**, *Mrs.* E.

——— Six hundred miscellaneous, valuable. *See* **Marquart**, John.

——— Technisch-chemisches Recept-Taschenbuch. *See* **Winckler**, E.

Recent discussions on the abolition of patents for inventions in the United Kingdom, France, Germany and the Netherlands. Evidence and speeches in its favor, by Sir William Armstrong; Bernard, von Bismarck, Chevalier, Fock, Godefroi, Lord Stanley, Macfie, Sir Roundell Palmer, James Stirling, and others. 8°. *London*, 1869.

Record, Congressional, of the 43d congress. *See* UNITED STATES. **Congress.**

Records of general science. By Robert D. Thomson; with the assistance of Thomas Thomson. v. 1–4. 8°. *London*, 1835–36.

RECREATIONS in mathematics and natural philosophy. *See* **Ozanam**, Jacques.

——— Mathematical and physical. *See* **Ozanam**, Jacques.

——— Philosophical. *See* **Philosophical.**

——— Rational. *See* **Hooper**, W.

Récréations mathématiques; composées de plusieurs problèmes plaisans et facétieux, d'arithmétique, géométrie, astrologie, optique, perspective, mécanique, chymie, et d'autres rares et curieux secrets. 1e et 2e partie. 24°. *Rouen*, 1629.

RECTIFYING. The rectifier's guide. *See* **Wright**, Joseph W.

Rédarès, J. M. M. Manuel pour l'éducation des vers à soie et la culture du mûrier. 18°. *Paris*, 1828. **Encyclopédie populaire, v. 20.** [?]

Redding, Cyrus. French wines and vineyards; and the way to find them. 16°. *London*, 1860.

——— A history and description of modern wines. 3d ed. 12°. *London*, 1860.

Reden, F. W. von. Der Boden und seine Benutzung im Kaiserstaate Österreich. 8°. *Wien*, 1857.

Redfield, J. W. Outlines of a new system of physiognomy. 8°. *New York*, 1849.

Redgrave, Gilbert R. Manual of design, compiled by. *See* **Redgrave**, Richard.

Redgrave, Richard. Manual of design from the writings and addresses of. By

Digitized by Google

Redgrave, Richard—Continued.
Gilbert R. Redgrave. 8°. *New York*, 1876. **South Kensington art and science handbooks, No. 6.**

Redtenbacher, F. Die Bewegungs-Mechanismen. Darstellung und Beschreibung eines Theiles der Maschinen-Modell-Sammlung der polytechnischen Schule in Carlsruhe. *Illus.* fol. *Mannheim*, 1857. pp. 28. Also, Neue Folge. *Illus.* fol. *Mannheim*, 1861. pp. 36.

——— Die Gesetze des Lokomotiv-Baues. *Illus.* 4°. *Mannheim*, 1855.

——— Die Luftexpansions-Maschine. *Illus.* 8°. *Mannheim*, 1853.

——— Der Maschinenbau. 3 Bde. 8°. Mit Atlas, 1 B., 4°. *Mannheim*, 1862–65.

——— Prinzipien der Mechanik und des Maschinenbaues. *Illus.* 8°. *Mannheim*, 1852.

——— Resultate für den Maschinenbau. 2te Aufl. *Illus.* 8°. *Mannheim*, 1852.

——— Theorie und Bau der Wasserräder. *Illus.* 8°. pl. fol. *Mannheim*, 1846.

——— Theorie und Bau der Turbinen und Ventilatoren. *Illus.* 8°. pl. fol. *Mannheim*, 1844.

Reducer's manual, The. *See* **Bloede,** Victor G.

Redwood, Theophilus. Practical pharmacy, by. *See* **Mohr,** F., and **Redwood,** T.

Reech, —. Théorie de l'injecteur automoteur des chaudières à vapeur de M. H. Giffard. 4°. *Paris*, 1860.

Reed, E. J. Mechanics' magazine; ed. by. *See* **Mechanics'** magazine.

——— Transactions of the Institute of naval architects; ed. by. *See* LONDON.

Reemelin, Charles. The wine maker's manual. 8°. *Cincinnati*, 1868.

Rees, Abraham. The cyclopædia, or universal dictionary of arts, sciences, and literature. 1st Amer. ed. 41 v., with 6 v. of plates. 4°. *Philadelphia*, 1810–24.

Reese, David Meredith. A dictionary of practical surgery; notes, additions, etc. *See* **Cooper,** Samuel.

——— Encyclopædia of domestic economy; ed. by. *See* **Webster,** T.

Reese, John J. The American medical formulary; based upon the United States and British pharmacopœias; including numerous standard formulæ, etc. 8°. *Philadelphia*, 1850.

Reese, M. D. Elements of chemistry and electricity; ed. by. *See* **Reid,** David B., and **Bain,** A.

REFORMATION, History of the. *See* **Stebbing,** H. **Lardner's cabinet cyclopædia, v. 65, 66.**

Reformed dyspeptic (A). *See* **Story** of a stomach.

REFRACTION, double, and polarization of light, Treatise on. By David Brewster. *See* LONDON. **Society of useful knowledge, v. 1.**

REGENSBURG. K. bayer.-botanische Gesellschaft. Denkschriften. B. 4, Abth. 1. 4°. *Regensburg*, 1859.

——— Zoologisch-mineralogischer Verein. Abhandlungen. Heft 9. 8°. *Regensburg*, 1864.

——— ——— Correspondenz- Blatt. Jahrg. 10–17, 1856–63. 8°. *Regensburg*, 1856–63.

REGISTER of officers and agents in the service of the United States. *See* UNITED STATES. **Interior** department.

——— and almanack. *See* **Gutch's.**

——— (The) of arts. *See* **Fessenden,** Thomas Green.

Register of the arts and sciences; containing an account of inventions, discoveries and processes. Ed. by L. Hebert. 1st series, v. 1–4, 1824–27; new series, v. 1–7, 1827–32. 8°. *London*, 1824–32.

Regnault, Henri Victor. Elements of chemistry; transl. from the French, by Thomas R. Betton; ed., with notes, by James C. Booth and William L. Faber. 2 v. *Illus.* 8°. *Philadelphia*, 1852.

Reich, F. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

Reichardt, Oscar, and **Stürenburg,** Carl. Lehrbuch der mikroskopischen Photographie. 8°. *Leipzig*, 1868.

Reiche, H. von. Anlage und Betrieb der Dampfkessel. Handbuch für Ingenieure, Kesselbesitzer und Kesselwärter. roy. 8°. *Leipzig*, 1872.

——— Die Maschinenfabrication. Entwurf, Kritik, Herstellung und Veranschlagung der gebräuchlichsten Maschinen-Elemente. 2 Bde. Mit Atlas. 8° und 4°. *Leipzig*, 1869–71.

Reichenbach, Karl von. Abstract of 'Researches on magnetism and on certain allied subjects'; including a supposed new imponderable. Transl. from the

Digitized by Google

Reichenbach, Karl von—Continued. German, by William Gregory. 8°. *London*, 1846.

Reichenbecker, Albert. Aufbereitung der geschwefelten Golderze in den Rocky Mountains, im Colorado Territorium, der Vereinigten Staaten. 8°. *Prag*, 1871.

Reid, Alexander. A dictionary of the English language. 8°. *New York*, 1867.

Reid, Andrew. Philosophical transactions of royal society, v. 6. Abridged by. *See* LONDON. **Royal** society.

Reid, David Boswell. Elements of chemistry, theoretical and practical. 3d ed. 8°. *Edinburgh*, 1839.

——— Illustrations of the theory and practice of ventilation, with remarks on warming, exclusive lighting, and the communication of sound. 8°. *London*, 1844.

——— Ventilation in American dwellings; with a series of diagrams, presenting examples in different classes of habitations. To which is added an introductory outline of the progress of improvement in ventilation, by Elisha Harris. 8°. *New York*, 1858.

——— and **Bain,** Alexander. Elements of chemistry and electricity. Ed. by M. D. Reese. 12°. *New York*, 1849. **Chambers' educational course, No. 4.**

Reid, G. H. An essay on New South Wales, the mother colony of the Australias. 8°. *Sidney*, 1876.

Reid, Henry. A practical treatise on concrete; and how to make it; with observations on the uses of cements, limes and mortars. 16°. *London*, 1869.

Reid, Hugo. The steam engine; a description of the construction and action of that engine; with a sketch of its history, and the laws of heat and pneumatics. 2d ed. *Illus.* 12°. *Edinburgh*, 1840.

Reid, Thomas. Essays on the intellectual powers of man. Abridged, with notes and illustrations from Sir William Hamilton and others. Ed. by James Walker. 12°. *Cambridge*, 1850.

Reid, Thomas. Treatise on clock and watch making, theoretical and practical. *Illus.* 8°. *Philadelphia*, 1832. Also, 5th ed. *Glasgow*, 1855.

Reider, Jacob Ernst von. Anleitung zur Erweiterung des Tabakbaues und Veredlung des Tabaks in der Kundgebung der

Reider, Jacob Ernst von—Continued. Geheimnisse der Tabak-Fabrikation. 8°. *Augsburg*, 1844.

Reifer, —. Holzbearbeitungsmaschinen. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 6.**

Reiff, Charles Philippe. Nouveau dictionnaire de poche, des langues Russe, Française, Allemande, et Anglaise. sm. 4°. *Saint Pétersbourg*, 1843.

Reigart, J. Franklin. The inventor's and patentee's guide and pocket record, containing the United States patent laws, with notes of numerous decisions of the United States courts, etc. 24°. *Lancaster, Pa.*, 1856.

——— The life of Robert Fulton, with copies of his original drawings. *Illus.* 8°. *Philadelphia*, 1856.

Reily, Frank W. The health-lift; its theory and practice. *Illus.* 8°. *Chicago, n. d.*

Reimann, M. Die Färberei der Gespinnste und Gewebe, mit Berücksichtigung der modernen Färbestoffen. 8°. *Berlin*, 1867.

Reimann, Friedrich A. Das Fleischerhandwerk; hrsg. v. *See* **Thon,** G. P. F. **12 Neuer Schauplatz der Künste.**

——— Die Kunst des Posamentirers, Bandfabrikanten, Bortenwirkers, Knopf- und Krepin-Machers. *Illus.* 8°. *Weimar*, 1840. **105 Neuer Schauplatz der Künste.**

——— Schlossermeister; Beiträge von. *See* **Grandpré,** L. M. J. O. de. **50 Neuer Schauplatz der Künste.**

Reinaud and **Favé.** Histoire de l'artillerie. 1re partie: du feu grégeois, des feux de guerre, et des origines de la poudre à canon. Texte, 8°; planches, 4°. *Paris*, 1845.

Reinhold, C. G. The farmer's promotion book; a new and scientific manuring system for the cultivation and increase of all kinds of grains, grasses, fodder and pasture, upon all kinds of soil. 4°. *Pittsburgh*, 1856.

Reinnel, F. Englisches Receptbuch für Maurer, Tüncher, Stubenmaler, Stuccaturarbeiter und Cementirer. Nach dem Englischen von A. W. Hertel. *Illus.* 8°. *Weimar*, 1856. **31 Neuer Schauplatz der Künste.**

Reinsch, Paul. Das Mikroskop in seiner Bedeutung für die Erweiterung der Naturerkenntniss, für die Entwickelung der

Digitized by Google

Reinsch, Paul—Continued.
physikalischen, der beschreibenden und physiologischen Wissenschaften. 8°. *Nürnberg*, 1867.

Reinwald, Ch. Catalogue annuel de la librairie française, années 1858-69. 8°. *Paris*, 1859-69.

Reis, Paul. Neue electrische und magnet-electrische Maschinen und deren Anwendungen. Drei Vorträge in der Rheinischen naturforschenden Gesellschaft zu Mainz, im März 1877. *Illus.* 8°. *Leipzig*, 1877.

Reischauer, Carl. Die Chemie des Bieres. Aus dessen Nachlass hrsg. von Victor Griessmayer. *Illus.* 16°. *Augsburg*, 1878.

Reischauer, G. C. Bleysesquiphosphat. *See* **Vogel,** A.

Reiset, J. Annuaire de chimie. *See* **Millon,** J.

Reissig, W. Handbuch für Holz- und Torfgas-Beleuchtung und einigen verwandten Beleuchtungsarten. Anhang zum Handbuche der Steinkohlengas-Beleuchtung von N. H. Schilling. *Illus.* 4°. *München*, 1863.

RELIGION, Natural. The pre-Adamite earth. *See* **Harris,** John.

——— Rationale divinorum officiorum. *See* **Rationale.**

——— Religio medici: with annotations and observations upon it. *See* **Brown,** *Sir* Thomas.

RELIGIOUS knowledge, Dictionary of. *See* **Potter's** popular encyclopedia. [†]

Remarks and experiments on different parts of the process of brewing. 8°. *Oxford*, 1807.

REMEDIES, New. *See* **Hale,** Edwin M.

RENAISSANCE court in the Crystal palace. *See* **Wyatt,** M. D., and **Waring,** J. B. **Crystal palace library, v. 2.**

RENAL affections. *See* **Frick,** Charles.

Renard, —. Bulletin de la Societé impériale des naturalistes de Moscou; red. par. *See* Moscow.

Renaud, Ed. Architecture rurale et communale. *See* **Duval,** C.

Renier, Léon. Encyclopédie moderne, publiée sous la direction de. *See* **Courtin,** E M. P. A.

Rennie, George. Essays on mill work and machinery; rev. by. *See* **Buchanan,** R.

——— On paddle wheels and the screw. *See* **Tredgold,** T. **Steam engine, v. 3.**

Rennie, George. Practical examples of modern tools and machines; supplementary to Buchanan's 'Mill work and other machinery'. *Illus.* 8°. *London*, 1842. pp. 27.

——— Strength of materials, by. *See* **Haskoll,** W. D. Assistant engineers' railway guide.

Rennie, James. Alphabet of scientific gardening, for the use of beginners. 16°. *London*, 1833.

——— Alphabet of zoology. 24°. *London*, 1833.

——— Die Baukunst der Insekten; ihre Verheerungen, ihre Aufbewahrung zu wissenschaftlichen Zwecken und ihre Eintheilung. Aus dem Englischen nach der neuesten verbesserten Ausgabe von Franz Kottenkamp. *Illus.* [2 Bde. in 1.] 16°. *Stuttgart*, 1847. **Wochenbände, 91-100.**

Rennie, John. Experiments on the power of water wheels; by. **Weale's papers on engineering, v. 4.**

——— Report on Holyhead and Port Dynllaen harbors. **Weale's papers on engineering, v. 2.**

——— A life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 2.**

Renwick, James. Applications of the science of mechanics to practical purposes. 16°. *New York*, 1840.

——— Steamboats of the United States. *See* **Tredgold,** T. **Steam engine, 1st series.**

——— The steam engine; with notes. *See* **Lardner,** D.

Répertoire de chimie appliquée. Compte rendu des applications de la chimie en France et à l'étranger. [La Société chimique de Paris.] Par Charles Louis-Barreswil. T. 1-5, 1859-63. 8°. *Paris*, 1859-63.

——— de chimie pure et appliquée. Compte rendu des progrès de la chimie pure et appliquée en France et à l'étranger. [La Société chimique de Paris.] Par Adolphe C. Wurtz. T. 1-4, 1858-62. 8°. *Paris*, 1858-62.

Repertory, Antiquarian. *See* **Antiquarian**

——— of arts, sciences and manufactures, The American. *See* **Mapes,** James J.

——— (The) of patent inventions, and other discoveries and improvements in arts, manufactures and agriculture. 1st series, v. 1-16, 1794-1802; 2d series, v. 1-46, 1802-25; 3d series, v. 1-16, 1825-33;

Digitized by Google

Repertory—Continued.
4th series, v. 1–18, 1834–42; 5th series, v. 1–40, 1843–62; with 5 v. of indexes. [1st and 2d series are called 'Repertory of arts, manufactures', etc.] 8°. *London*, 1794–1862.

Report of the board of engineers on the experiments tried with the horizontal fire tube and the vertical water-tube boilers. *Illus.* 4°. *Philadelphia*, 1868.

REPORTS. *See* UNITED STATES, GREAT BRITAIN, FRANCE, *etc., for governmental reports, and* **Transactions** *for reports of societies, etc.*

——— and notes on patent cases in England. *See* **Webster**, Thomas.

Repository, Gill's technological. *See* **Gill's.**

——— of useful information. *See* **Great** American repository.

——— technical, The. *See* **Gill**, Thomas.

REPTILES and birds. A popular account of their various orders. *See* **Figuier**, Louis.

——— Natural history of. *See* **Swainson**, W. **Lardner's cabinet cyclopædia, v. 117, 118.**

Repton, Humphry. Landscape gardening and landscape architecture; with a historical and scientific introduction, a systematic analysis, a biographical notice, notes and alphabetical index, by J. C. Loudon. *Illus.* 8°. *London*, 1840.

Republic (The) of the United States of America: its duties to itself, and its responsible relations to other countries; embracing a review of the late war between the United States and Mexico; its causes and results; and of those measures of government which have characterized the democracy of the union. 8°. *New York*, 1848.

RESEARCH, Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 25.**

RESERVOIRS. The construction of catch water reservoirs in mountain districts. *See* **Beloe**, Charles H.

——— Designing and construction of storage, by Arthur Jacob. **Van Nostrand's science series, No. 6.** [†]

RESPIRATION. By W. Pepys and W. H. Allen. *See* **Science**, Miscellaneous.

——— Ueber einen neuen Respirations-Apparat. *See* **Pettenkofer**, M.

RESPIRATORY organs, Diseases of. *See* **Flint**, Austin.

RETAINING walls, Practical designing of. *See* **Jacob**, Arthur. **Van Nostrand's science series, No. 3.**

——— ——— Surcharged and different forms of. *See* **Tate**, James S. **Van Nostrand's science series, No. 7.**

Retrospect of philosophical, mechanical, chemical, and agricultural discoveries. v. 1–7, 1806–12. 8°. *London*, 1806–12.

——— (The) of practical medicine and surgery. *See* **Braithwaite**, W.

Reuleaux, F. Briefe aus Philadelphia. Vom Verfasser durchgesehene und vermehrte Ausgabe. 8°. *Braunschweig*, 1877.

——— Der Constructeur. Handbuch zum Maschinen-Entwerfen. *Illus.* 8°. *Braunschweig*, 1861.

——— Theoretische Kinematik. Theorie des Maschinenwesens. Mit Atlas. 8°. *Braunschweig*, 1875.

REVENUE laws. Laws relating to internal revenue in force Aug. 1, 1866. *See* UNITED STATES. **Treasury dept.** Internal revenue.

——— ——— of the United States. *See* **Andrews**, C. C.

——— system of the United States, 1865–66, Report of a commission appointed for revision of. *See* UNITED STATES. **Treasury dept.** Internal revenue.

Review of the pamphlet of W. N. P. Fitzgerald, in opposition to the extension of the patent of Obed Hussey; also, of the defence, or evidence in favor of said extension. With a brief history of reaping machines, and an examination of the claims for priority of invention, and an appendix. 8°. *Baltimore*, 1854. pp. 16+32.

REVIEWS. *See* **Periodicals.**

Reville, Lavallé, and Roquefort, B. de. Vues pittoresques et perspectives des salles du musée des monuments françois, et des principaux ouvrages d'architecture, de sculpture et de peinture sur verre qu'elles renferment. *Illus.* fol. *Paris*, 1816.

REVISED statutes of the United States. *See* UNITED STATES. **Congress.**

REVOLVER (The), its description, management, and use. *See* **Dove**, P. E.

REVOLVERS. Die Dreh- und Repetirpistolen oder die sogenannten Revolvers. *See* **Anquetil**, —. **222 Neuer Schauplatz der Künste.**

REVOLVERS. Théorie du revolver Mangeot Comblain. *See* **Mangeot**, H.

Digitized by Google

Revue algérienne et coloniale. T. 2-3. 8°. *Paris*, 1860.

——— de l'exposition de 1867. 4 T. [Plates bound in 3 v.] 8°. *Paris et Liége*, 1867-70.

Revue des deux mondes. Nouv. série. T. 21-24, 1848. Nouv. période, T. 1-4, 1849. 2e période, T. 67-108, 1867-73. 3e période, T. 1-24, 1874-77. 8°. *Paris*, 1848-77 ——.

——— maritime et coloniale. [Ministère de la marine et des colonies.] T. 1-11, 1861-64. 8°. *Paris*, 1861-64.

——— orientale et américaine, publiée avec le concours de membres de l'Institut, de diplomates, de savants, de voyageurs, d'orientalistes et d'industriels, par Léon de Rosny. T. 3. 8°. *Paris*, 1860.

——— photographique. Recueil mensuel exclusivement consacré au progrès de la photographie. T. 1-8. 8°. *Paris*, 1855-63.

——— universelle des mines, de la métallurgie, des travaux publics, des sciences, et des arts appliqués à l'industrie; publiée sous la direction de Ch. De Cuyper. T. 1-40, 1857-76. [Avec table générale des matières.] 8°. *Paris et Liége*, 1857-76 ——.

Révy, Julian John. The progressive screw as a propeller in navigation. 8°. *London*, 1860.

Reynaud, Léonce. Memoir upon the light house illumination of the coast of France. Transl. for the light house board of the United States, by T. A. Jenkins. With atlas of plates. 8°. *Washington*, 1871.

——— Mémoire sur l'éclairage et le balisage des côtes de France. 4°. Avec atlas, fol. *Paris*, 1864.

Reynold-Chauvancy, Charles de. Code Reynold. Télégraphie nautique polyglotte internationale. 2e éd. *Illus.* 8°. *Paris, n. d.*

Reynolds, Emerson J. British journal photographic almanac; ed. by. *See* **British** journal.

Reynolds, George L. Formula for making porcelain pictures. 12°. *New York*, 1865. pp. 45.

Reynolds, L. E. A treatise on handrailing. Three original systems of applying the trammel, or string, in drawing the face-moulds of geometrical, elliptical and spiral handrails. roy. 8°. *New Orleans*, 1840.

Rhees, William Jones. An account of the Smithsonian institution; its founder, building, operations, etc.; prepared from reports of Prof. Henry to the regents, and other authentic sources. 8°. *Washington*, 1858.

——— Manual of public libraries, institutions, and societies in the United States and British Provinces of North America. 8°. *Philadelphia*, 1859.

RHENISH Provinces. Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande. *See* **Prussia** — Rhenish Provinces.

RHETORIC. Method of teaching and studying the belles-lettres, etc. *See* **Rollin,** Charles.

RHINE, Bridge of the. Die Eisenbahnbauten bei Kehl. *See* CARLSRUHE.

——— ——— Rapport sur les travaux de fondation du pont du Rhin, par M. Bande. *See* **Castor,** A.

RHODE ISLAND. Historical society. Annual addresses and discourses. 1844-55. 8° *Providence*, 1844-55.

——— ——— Collections. v. 1-5, 1827-43. 8°. *Providence*, 1827-43.

——— Interference of the executive in the affairs of. *See* UNITED STATES. **Congress.**

——— Society for the encouragement of domestic industry. Transactions of 1859. 8°. *Providence*, 1860.

RIBBONS. Tissage des rubans. *See* **Seillon,** J.

Rice, Nathan P. Trials of a public benefactor, as illustrated in the discovery of etherization. 12°. *New York*, 1858.

Rich, Elihu. The phenomena and laws of heat; by Achille Cazin. Transl. and ed. by. *See* **Cazin,** Achille. **Illustrated library of wonders, v. 7.**

Richards, J. A review of our patent system, with other information for inventors, manufacturers, engineers, and mechanics. 8°. *Philadelphia*, 1869. pp. 18.

——— A treatise on the construction and operation of wood working machines, including a history of the origin and progress of the manufacture of wood working machinery. 8°. *London*, 1872.

Richards, T. Addison. Miller's guide to Saratoga Springs and vicinity. *Illus.* 12°. *New York*, 1867.

Richards, William. The gas consumer's guide; containing instructions on the management of gas, the means to econo-

Digitized by Google

Richards, William—Continued.
mize gas, a description of gas meters, ventilation, etc. 16°. *London*, 1866.
——— A practical treatise on the manufacture and distribution of coal gas. *Illus.* 4°. *New York*, 1877.

Richards, William C. A day in the New York Crystal palace, and how to make the most of it. 12°. *New York*, 1853.
——— Official catalogue of the New York exhibition of the industry of all nations, 1853. 1st rev. ed. [Appended is a catalogue of the picture gallery.] 12°. *New York*, 1853.

Richardson, Albert D. Our new states and territories; being notes of a recent tour of observation through Colorado, Utah, Idaho, Nevada, Oregon, Montana, Washington territory, and California. 8°. *New York*, 1867.

Richardson, Benjamin W. Memoirs of John Snow. *See* **Snow,** John.

Richardson, Charles. Cholera; its cause, prevention and cure. 8°. *New York*, 1849.

Richardson, Charles. A new dictionary of the English language. 2 v. 4°. *London*, 1839

Richardson, Charles. War-chess; or the game of battle. 21°. *New York*, 1866.

Richardson, Charles James. A popular treatise on the warming and ventilation of buildings, showing the advantage of heated water circulation, etc. *Illus.* 8°. *London*, 1837. Also, 3d ed. *London*, 1856.

Richardson, G., and son, A collection of ornaments in the antique style, designed and engraved by. fol. *London*, 1816.

Richardson, G. B. Sentences for convoys and a system of geometrical signals. *See* **Marryat.** Code of signals.

Richardson, H. D. Domestic fowls and ornamental poultry. **Saxton's rural handbooks, v. 3.**
——— The hive and honey-bee; with directions for obtaining a considerable income from this branch of rural economy; an account of the diseases of bees, with their remedies; remarks as to their enemies, and the best mode of protecting bees from their attacks. 16°. *Dublin*, 1847.
——— The hog; its origin and varieties. **Saxton's rural handbooks, v. 2.**

Richardson, John. Table of the weight of wrought iron. *London. n. t. p.*

Richardson, Joseph. A practical treatise on mechanical dentistry. *Illus.* 8°. *Philadelphia*, 1860. 2d ed., 1869.

Richardson, Thomas. Chemical technology; ed. by. *See* **Knapp,** T.
——— Chemical technology. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

Richardson, W. H., *jr.* The boot and shoe manufacturers' assistant and guide; containing a brief history of the trade. History of India-rubber and gutta-percha, and their application to the manufacture of boots and shoes; instructions in the art, with diagrams, scales, etc. Vulcanization and sulphurization, English and American patents; with a treatise on tanning, ed. by. 12°. *Boston*, 1858.

RICHMOND (Va.) library. Athenæum building. A catalogue of books, classified. 8°. *Richmond*, 1855.

Richter, Carl Thomas. Allgemeine Bildungsmittel.—Volksbibliotheken. Vereinswesen. Arbeiterwohnungen. Sparcassawesen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**
——— Bürgerliches Wohnhaus. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 19.**
——— Internationale Patent-Congress, 1873. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**
——— Kinder-Spielwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 10.**
——— Welthandel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**
——— and **Falk,** C. Schafwoll-Gewebe. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**
——— **Fix,** Anton, and **Goldschmidt,** S. Schmuckfedern, etc. Tapezir-Arbeiten. Schuhwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**
——— and others. Schafwoll-Waaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Richter, Eugene. Co-operative stores; their history, organization and management. Based on the German work of, with annotations and amendments ren-

Digitized by Google

Richter, Eugene—Continued.
dering the work adapted for use in the United States. 8°. *New York*, 1867.

——— and **Braun,** W. Die Wollengarn-Färberei in ihrem ganzen Umfange. Hrsg. von. 8°. *Berlin*, 1867.

Richter, W. E. The poor man's friend; containing the infallible cure for the black tongue, its causes and symptoms: also, the only remedy known to prevent the contagion from attacking those in charge of the patient; with the treatment for measles and scarlet fever, and fifty valuable remedies for various diseases. Compiled from the German, by. 16°. *Hagerstown, Md.*, 1847.

Rickman, John. Life of T. Telford; ed. by. *See* **Telford,** T.

Ricord, Philip. Illustrations of syphilitic disease. Transl. from the French, by Thomas F. Betton; collated and arranged, by P. B. Goddard. 4°. *Philadelphia*, 1851.

Riddell, Robert. The practical carpenter and joiner. Illustrated by card board models. fol. *Philadelphia*, 1872.

——— The scientific stair builder. 1 v. With atlas. fol. *Philadelphia*, 1854.

Riddle, Joseph Esmond. A copious and critical Latin-English lexicon, founded on the German-Latin dictionaries of Dr. William Freund. 2d ed. 4°. *London*, 1851.

Rideli, M. B. Strassen-Fuhrwerke. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Ridner, John P. The artist's chromatic hand-book. Treatise on pigments, their properties and uses in painting. 12°. *New York*, 1850.

Riedler, A. Brandt's hydraulische Gesteins-Bohrmaschine. Ein neues System der Gesteinsbohrung durch hydraulischen Druck und rotirende Stahlbohrer. *Illus.* fol. *Wien*, 1877.

——— Gesteinsbohrmaschinen. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 15.**

——— Personen- und Lastenaufzüge und Fördermaschinen. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 20.**

Riefiel. Fabrication des bouches à feu de bronze au 16e siècle en Italie. *See* **Biringuccio,** Vanoccio.

Rieffel. Manuel des armes à feu, trad. par. *See* **Dub,** A.

——— Technologie des armes à feu, trad. par. *See* **Meyer,** M.

——— La théorie du tir des armes à feu rayées, trad. par. *See* **Rouvroy,** W. H. v.

Riego de la Branchardière, Eleonore. The crochet book. obl. 8°. *London*, 1857. pp. 46.

Riehl, W. H. Begriff der bürgerlichen Gesellschaft. Vortrag k. Adademie der Wissenschaften. 4°. *München*, 1844. pp. 16.

Riess, Peter Theophil. Abhandlungen zu der Lehre der Reibungselektricität. 8°. *Berlin*, 1867.

——— Die Lehre von der Reibungselektricität. 2 Bde. *Illus.* 8°. *Berlin*, 1853.

Rieth, R. Die Volumetrie. Chemische Maassanalyse zum Gebrauch im Laboratorium. 8°. *Bonn*, 1871.

Riffault. Manuel du brasseur; trad. par. *See* **Accum,** F. **105 Manuels Roret.**

——— Manuel complet du teinturier. 4e éd. augmentée par A. D. Vergnaud. 18°. *Paris*, 1836. **71 Manuels Roret.**

Riffault, Anatole. Manuel de l'électricité atmosphérique; trad. par. *See* **Murray,** J. **92 Manuels Roret.**

——— Neues vollständiges Handbuch der Färberei auf Wolle, Seide, Baumwolle und andere Stoffe. Vom Französischen, vermehrt, von Heinrich Leng. 8°. *Ilmenau*, 1826. **21 Neuer Schauplatz der Künste.**

Riffault, Vergnaud, and **Toussaint.** A practical treatise on the manufacture of colors, etc. Revised by M. F. Malepeyre. Transl. from French by A. A. Fesquet. 8°. *Philadelphia*, 1874.

RIFLE ammunition. *See* **Hawes,** A. B.

——— (The), and how to use it. *See* **Busk,** Hans.

——— and rifle practice. *See* **Wilcox,** C. M.

——— Improved American. *See* **Chapman,** J. R.

——— musket, The. *See* **Jervis-White-Jervis,** H.

——— ——— The Springfield breech-loading. *See* UNITED STATES. **War department.**

——— Shot-gun and sporting rifle. *See* **Shot-gun.**

——— (The) simplified. *See* **Dougal,** J. D.

Digitized by Google

RIFLED ordnance, in the British service. *See* **Stoney**, F. S., and **Jones**, C.

RIFLEMEN, Hints to. *See* **Cleveland**, H. W. S.

RIGA. Naturforscher-Verein zu Riga. Arbeiten. Neue Folge. Heft 1–4, 1865–71. 8°. *Riga*, 1865–71.

—— —— Correspondenzblatt. Jahrg. 9–20, 1855–74. 8°. *Riga*, 1855–74.

—— —— Denkschrift. 4°. *Riga*, 1870.

RIGGING, Art of. *See* **Art.**

—— Elements and practice of. *See* **Elements.**

—— Key to the leading of. *See* **Lever**, D.

—— Treatise on. *See* **Kipping**, R. **Weale's series, No. 54.**

Riggs, Elias. A manual of the Chaldee language; containing a Chaldee grammar from the German of G. B. Winer; a chrestomathy, a vocabulary and appendix on Rabbinic and Samaritan dialects. roy. 8°. *New York*, 1858.

Riggs, Stephen R. Grammar and dictionary of the Dakota language. **Smiths'n contrib., v. 4.**

RIGHTS of American citizens. *See* **Oliver**, Benjamin L.

Riley, H. T. Dictionary of Latin quotations, proverbs, maxims and mottos, including law terms and a selection of Greek quotations. 8°. *London*, 1860.

—— Natural history of Pliny. Transl. by. *See* **Plinius Secundus**, C.

Riley, Harvey. The mule. Treatise on the breeding, training and uses to which he may be put. 12°. *New York*, 1867.

Riley, John C. A compend of materia medica and therapeutics, for the use of students. 8°. *Philadelphia*, 1869.

Rimbault, Edward. F. History of the organ. *See* **Hopkins**, E. J.

—— The pianoforte; its origin, progress and construction, with some account of instruments of the same class which preceded it; viz. The clavichord, virginal, spinet, harpsichord, etc., with specimens of music, composed for keyed-stringed instruments. 4°. *London*, 1860.

Rindvieh-Stämme Württembergs. 4°. *Stuttgart*, 1853.

RINGING bells, The art of. *See* **White**, J.

Ringwalt, J. Luther. American encyclopædia of printing; ed. by. imp. 8°. *Philadelphia*, 1871.

Rintoul, A. N. A guide to painting photographic portraits, draperies, backgrounds, etc., in water colors. *Illus.* 16°. *London, n. d.* pp. 44.

Riou, Ad. Des soins à donner à la santé; hygiène. 16°. *Paris, n. d.*

Ripa, Cesare. Iconologia di Cesare Ripa Perugino, cavalier Diss. Mauritio et Lazaro. Divisa in tre libri. 4°. *In Venetia*, 1645.

——Iconologie, ou la science des emblèmes, devises, etc., qui apprend à les expliquer; la plupart de César Ripa, par J. B. T. 1–2. 12°. *Amsterdam*, 1698.

Ripley, E. L. System of map drawing. 4°. *New York*, 1866.

Ripley, George, and **Dana**, Charles A. The new American cyclopædia; a popular dictionary of general knowledge; ed. by. v. 1–16, with supplement. 8°. *New York*, 1859–63.

—— —— The American cyclopædia: a popular dictionary of general knowledge; ed. by. v. 1–16. 8°. *New York*, 1874–76.

Risch, Theodor. Bericht über Markthallen in Deutschland, Belgien, Frankreich, England und Italien. 8°. *Berlin*, 1867.

Ritchie, Robert. The farm engineer; a treatise on barn machinery, particularly on the application of steam and other motive powers to the thrashing machine; embracing an account of the methods practiced in ancient and modern times for thrashing and winnowing grain, with descriptions of the different steam engines now used and projected for agricultural purposes; and the application of steam as a motive power at farms. *Illus.* 8°. *Glasgow*, 1849.

—— Handbuch des Eisenbahnwesens; unter Zugrundelegung des englischen Werkes von. Mit Benutzung der besten vorhandenen Hülfsmittel bearbeitet von Dr. Carl Hartmann. 2te Ausgabe. *Illus.* 8°. *Weimar*, 1853. **152 Neuer Schauplatz der Künste.**

—— Railways; their rise, progress and construction. With remarks on railway accidents, and their prevention. *Illus.* 16°. *London*, 1846.

—— A treatise on ventilation, natural and artificial. *Illus.* 8°. *London*, 1862.

Rittenhouse, David, Memoirs of the life of. *See* **Barton**, William.

Digitized by Google

Ritter, Carl. The comparative geography of Palestine and the Sinaitic peninsula. Transl. by William L. Gage. 8°. *New York*, 1866.

Ritthausen, H. Die Eiweisskörper der Getreidearten, Hülsenfrüchte und Ölsamen. 8°. *Bonn*, 1872.

Rittinger, P. Centrifugal-Ventilatoren und Centrifugal-Pumpen. Theorie und Bau aller Arten derselben, mit Berücksichtigung der Resultate vieler Versuche. *Illus.* 8°. *Wien*, 1858.

—— Erfahrungen im berg- und hüttenmännischen Maschinen-, Bau- und Aufbereitungswesen. Jahrg. 1858-66. [3 v., and 3 v. Tafeln.] 4°. *Wien*, 1858-66.

Rittinger, Peter von. Kurze Mittheilungen über Berg- und Hüttenwesens-Maschinen und Baugegenstände auf der allgemeinen Industrie-Ausstellung zu Paris, 1867. 8°. *Wien*, 1867.

—— Lehrbuch der Aufbereitungskunde in ihrer neuesten Entwicklung und Ausbildung. Mit Atlas. 8°. *Berlin*, 1867.

—— Taschenbuch der Aufbereitungskunde. 1 B., mit 2 Bde. Nachtrag. 24°. Atlas, 8°. *Berlin*, 1867-73.

—— Theorie und Bau der Rohrturbinen im Allgemeinen und der sogenannten Jouval-Turbinen insbesondere. *Illus.* 8°. *Prag*, 1861.

Rittinger's stetigwirkender Setzherd. *See* **Bellusich,** Johann von.

RIVER engineering. *See* **Stevenson,** D.

—— —— Zur Schiffbarmachung der Flüsse. *See* **Schlichting,** J.

River (The) Mississippi, from St. Paul to New Orleans; described with views and descriptions of cities connected with its trade and commerce, and the places and objects of interest in the valley of the Mississippi; with charts. 8°. *New York*, 1859.

RIVERS, Treatise on. *See* **Frisi,** P. **Weale's series, Nos. 121, 122.**

RIVETS. Abridgments English Patents, No. 58.

Rivot, L. E. Principes généraux du traitement des minérais métalliques. Métallurgie théorique et pratique. T. 1, Cuivre; T. 2, Plomb et argent. 8°. *Paris*, 1859-60.

ROAD engines. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 18.**

ROADS. Abridgments English Patents, No. 35.

—— Art of constructing and repairing common. *See* **Law,** Henry. **Weale's series, No. 46.**

—— Construction of common roads and the public vehicles used on them. *See* **Adams,** William B.

—— Constructionen aus dem Gebiete des Strassenbaues. *See* CARLSRUHE.

—— Fall in the cross-sections of. By J. Neville. **Weale's papers on engineering, v. 3.**

—— General and special road laws of Pennsylvania. *See* **Hooton,** F. C.

—— History of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 3.**

—— Observations on plank. *See* **Geddes,** George.

—— Plank roads, with remarks on roads in general. *See* **Kingsford,** W.

—— The practice of making and repairing. *See* **Hughes,** Thomas.

—— Reports on. *See* **Strickland,** W.

—— Road making; comprising the location, construction and improvement of. *See* **Gillespie,** W. M.

—— Vorlegeblätter zur Strassen-Baukunde. *See* **Bauernfeind,** C. M.

—— Der Waldwegbau. *See* **Scheppler,** K.

ROASTING ores. Traité théorique des procédés métallurgiques de grillage. *See* **Plattner,** Carl Fr.

Roat, A. Universal gauger. 8°. *Philadelphia*, 1849.

Robb, James B. A collection of patent cases, decided in the supreme and circuit courts of the United States, from their organization to 1850; with notes and index to the subject matter. 2 v. 8°. *Boston*, 1854. [2 copies.]

—— In the matter of the interference between the application of Henry W. Farley and the National steam gauge co., assignees of E. G. Allen. Argument of J. B. Robb, Mar. 15, 1859. 8°. *Washington*, 1859. pp. 36 + 12.

—— In the matter of the interference declared between Henry W. Farley, for a patent for an improvement in steam pressure gauges, and the patent granted to Enos G. Allen. Argument of counsel. 8°. *Washington*, 1857. pp. 18.

Robbins, Zenas C. Argument before the Hon. James S. Morsell, in the matter of

Digitized by Google

Robbins, Zenas C.—Continued.
the appeal from the decision of Hon. Philip F. Thomas, commissioner of patents, refusing a patent to Edward Maynard, for his improved breech-loading fire-arm; together with the decision of Judge Morsell reversing the said decision. Hearing Aug. 17, 1860. 8°. *Washington*, 1860. pp. 30.

——— Argument of counsel and other papers, relating to the appeal from a decision of the commissioner of patents, rejecting the application of Edward Maynard, for a patent for an improved breech-loading fire-arm. 8°. *Washington*, 1860. pp. 32.

Robert, Georges. Photographie élémentaire. Traité de photographie sur collodion. Positifs et négatifs sur verre. Tirage des épreuves positives sur papier. 8°. *Paris*, 1859. pp. 46.

Robert, Henri. Les mouvements des corps célestes et les principaux phénomènes qui en résultent, démontrés à l'aide des appareils cosmographiques. 2e éd. 12°. *Paris*, 1852.

Robert-Houdin, —. Les tricheries des Grecs dévoilées. L'art de gagner à tous les jeux. 8°. *Paris*, 1861.

Robertson, Abraham. A manual on extracting teeth. 2d ed. 12°. *Philadelphia*, 1868.

Robertson, Henry. A general view of the natural history of the atmosphere, and its connection with the sciences of medicine and agriculture. 2 v. 8°. *Edinburgh*, 1808.

Robertson, J. C. Mechanics' magazine; ed. by. *See* **Mechanics'** magazine.

Robertson, James. On winding apparatus, including mining hoists. Excerpt minutes of proceedings of the meeting of the Institution of engineers in Scotland. 8°. *Glasgow*, 1858.

Robinson, Edward. A Greek and English lexicon of the New Testament. New ed. roy. 8°. *New York*, 1850.

Robinson, H. P. Pictorial effect in photography: hints on composition and chiaroscuro for photographers. To which is added a chapter on combination printing. sm. 4°. *London*, 1869.

Robinson, Horatio N. Concise mathematical operations; a sequel to the author's class books. 8°. *Cincinnati*, 1854.

Robinson, Horatio N. An elementary treatise on algebra. 12°. *Cincinnati*, 1850.

——— Elements of analytical geometry and the differential and integral calculus. 8°. *Cincinnati*, 1856.

——— The elements of geometry, plane and spherical trigonometry, and of conic sections. 8°. *Cincinnati*, 1850.

——— Mathematical recreations, solution of important equations, and useful problems in geometry, surveying and astronomy. 8°. *Albany*, 1851.

——— The progressive practical arithmetic, with concise analytic and synthetic methods of solution. 8°. *New York*, 1859.

——— A theoretical and practical treatise on algebra. 8°. *Cincinnati*, 1858.

——— A treatise on astronomy, descriptive, theoretical and physical. 8°. *Cincinnati*, 1857.

——— A treatise on surveying and navigation; uniting the theoretical, practical and educational features of these subjects. 4th ed. 8°. *Cincinnati*, 1857.

Robinson, James. The whole art of curing, pickling, and smoking meat and fish; with miscellaneous receipts and directions for the construction of an economical drying chimney and apparatus. 16°. *London*, 1847.

——— The whole art of making British wines, cordials and liqueurs; also, strong and cordial waters. 16°. *London*, 1848.

Robinson, S. W. A practical treatise on the teeth of wheels; with the theory of the use of the odontograph. 18°. *New York*, 1876. **Van Nostrand's science series, No. 24.**

Robinson, Solon. Thatsachen für Landwirthe. Transl. by A. J. Johnson. roy. 8°. *New York, and Cleveland, Ohio*, 1868.

Robinson, W. The parks, promenades and gardens of Paris; described and considered in relation to the wants of our own cities, and of public and private gardens. 8°. *London*, 1869.

Robiquet, E. Manuel théorique et pratique de photographie sur collodion et sur albumine. 12°. *Paris*, 1859.

Robison, John. A system of mechanical philosophy, with notes by David Brewster. 4 v. [and 1 v. of plates]. 8°. *Edinburgh*, 1822. [Plates missing.]

Digitized by Google

Robison, John, **Price,** —, and **Tredgold,** Thomas. A rudimentary treatise on the principles of construction in the carpentry and joinery of roofs. 12°. Atlas, 4°. *London*, 1859. **Weale's series, No. 124.**

—— and **Tredgold,** Thomas. A rudimentary treatise on the principles of construction in carpentry and joinery. 12°. Atlas, 4°. *London*, 1859. **Weale's series, No. 123.**

Robson, Edward Robert. School architecture. Remarks on planning, designing, building and furnishing of schoolhouses. roy. 8°. *London*, 1874.

Rock, Daniel. Textile fabrics. *Illus.* 8°. *London*, 1876. **South Kensington art and science handbooks, No. 1.**

ROCK-drilling machines. Gesteinsbohrmaschinen. A. Riedler. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm.-Weltausst. 1876, Heft 15.**

ROCKETS. Lectures sur les fusées de guerre. *See* **Konstantinoff.**

—— The making of. *See* **Anderson,** Robert.

—— Mémoire sur les fusées de guerre. *See* **Brussel de Brulard.**

ROCKY mountains, Exploring tour beyond the. *See* **Parker,** S.

—— —— Geographical and geological survey of the Rocky mountain region. *See* UNITED STATES. **Interior dept.** Geol. and geogr. survey. J. W. Powell.

RODENTIA. Monographs of the North American rodentia. By Elliott Coues and Joel Asaph Allen. *See* UNITED STATES. **Interior dept.** Geological survey.

Röding, Johann Hinrich. Allgemeines Wörterbuch der Marine in allen europäischen Seesprachen, nebst vollständigen Erklärungen. *Illus.* B. 1-4. 4°. *Hamburg, Halle, n. d.*

Roditzky, Helene v. Frauen-Arbeiten. Stickerei und Spitzen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Rodman, Thomas J. Reports of experiments on the properties of metals for cannon, and the qualities of cannon powder, with an account of the fabrication and trial of a 15-inch gun. 4°. *Boston*, 1861.

Rodwell, G. F. The birth of chemistry. *Illus.* 12°. *London*, 1874.

Roediger, E. Roediger's edition of the Hebrew grammar of Gesenius. *See* **Gesenius,** Wilhelm.

Roemer, J. Cavalry: its history, management and uses in war. 8°. *New York*, 1863.

—— Mezzofanti's system of learning languages, applied to the study of French, with treatise on French versification and a dictionary of idioms, peculiar expressions, etc. 12°. *New York*, 1850.

Roffaen, E. Traité descriptif et raisonné des constructions hydrauliques à la mer et dans les eaux courantes, avec applications aux travaux militaires. 1e partie. Hydraulique. 2e. Constructions maritimes. 3e. Constructions en eaux courantes. 8°. *Bruxelles*, 1861-63.

Rogeat *frères.* Manufactures d'articles en tôle et fonte émaillées, d'appareils portatifs pour chauffage, cuisine et fourneaux maçonnés perfectionnés. *Illus.* fol. *Lyon, n. d.*

Rogers, Fairman. Terrestrial magnetism, and the magnetism of iron ships. *Illus.* 8°. *New York*, 1877. **Van Nostrand's science series, No. 30.**

Rogers, Henry J. The American code of signals for vessels in merchant service. 8°. *New York*, 1854.

—— French et al. vs. Rogers et al. Electric telegraph. *See* **French,** B. B.

—— Life-saving signal book, or appendix to the American code, for the use of lifeboat stations and vessels in distress. 8°. *Baltimore*, 1856.

—— Marine telegraphic list of American merchant vessels of 150 tons and upwards, employed in the commerce of the United States; furnished for the American code of signals, by the secretary of the treasury. 8°. *New York*, 1855,

—— The telegraph dictionary, and seaman's signal book. 8° *Baltimore, n. d.*

—— and **Black,** —. American semaphoric signal book, for the use ofvessels employed in the United States naval, revenue and merchant service. 2d ed. 8°. *Baltimore*, 1847.

—— —— Marine roll, or list of the names of the permanently registered and enrolled vessels above twenty tons, comprising the mercantile marine of the

Digitized by Google

Rogers, H. J., and **Black**—Continued. United States; furnished for the American semaphoric signal book, by authority of the treasury department. 8°. *Baltimore*, 1847.

Rogers, Samuel B. An elementary treatise on iron metallurgy, up to the manufacture of puddled iron bars; built upon the atomic system of philosophy, the elements operated upon being estimated according to Wollaston's hydrogen scale of equivalents; comprising suggestions relative to important improvements in the manufacture of iron and steel, and the conduct of extensive iron works, with analytical tables of iron making materials. 8°. *London*, 1857.

Roget, Peter Mark. Darstellung der Elektrizität. Hrsg. von der Gesellschaft zur Verbreitung nützlicher Kenntnisse. Aus dem Englishen von Franz Kottenkamp. *Illus.* 16°. *Stuttgart*, 1847. **Wochenbände, 129-133.**

——— Darstellung des Magnetismus. Hrsg. von der Gesellschaft zur Verbreitung nützlicher Kentnisse. Aus dem Englischen von Franz Kottenkamp. *Illus.* 16°. *Stuttgart*, 1847. **Wochenbände, 152-156.**

——— Thesaurus of English words and phrases; so classified and arranged as to facilitate the expression of ideas and assist in literary composition. Revised and edited with a list of foreign words defined in English, and other additions by Barnas Sears. New Amer. from 3d London ed. 12°. *Boston*, 1857. Another ed., 1866.

——— Treatises on electricity, magnetism, etc., by. *See* LONDON. **Society of useful knowledge, v. 2.**

Rohart, F. Guide de la fabrication économique des engrais au moyen des tous les éléments qui peuvent être avantageusement employés en agriculture. Renseignements pratiques sur l'assainissement des opérations et des établissements insalubres, sur l'emploi du guano, des phosphates fossiles, etc. Précédé d'un aperçu statistique sur la publication générale des substances. Pub. de Charles Laboulaye. 8°. *Paris*, 1858.

Rohrer, Martin M. Practical calculator. A pocket manual of plain rules and calculations for business operations. 18°. *Lancaster, Pa.*, 1859.

Rojas, Marco A. Youmans' chemistry; transl. into Spanish by. *See* **Youmans,** Edward L.

Roland de la Platière, Jean Marie. Art du fabricant d'étoffes en laine, par. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 30 and 19.**

——— Art du fabricant de velours de coton, par. *See* PARIS. **Acad. roy. des sci.; arts et métiers, v. 30 and 19.**

——— Art du tourbier, par. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 19.**

Rolfe, W. J., and **Gillet,** J. A. The Cambridge course of elementary physics. Part 1st. Cohesion, adhesion, chemical affinity, and electricity. 12°. *Boston*, 1867.

Rollet, Augustin. Mémoire sur la meunerie, la boulangerie et conservation des grains et des farines, précédé de considérations sur le commerce des blés en Europe. 4°. *Paris*, 1847.

Rollin, Charles. The history of the arts and sciences of the antients, under the following heads: agriculture, commerce, architecture and architects, sculpture and sculptors, painting and painters, music and musicians, the art military. Transl. from the French. 2d ed. *Illus.* 3 v. 8°. *London*, 1768.

——— The method of teaching and studying the belles-lettres; or, an introduction to languages, poetry, rhetoric, history, moral philosophy, physics, etc.; with reflections on taste, and instructions with regard to the eloquence of the pulpit, the bar, and the stage. Illustrated with passages from the most famous poets and orators. Transl. from the French. 6th ed. with alterations. 3 v. 8°. *London*, 1769.

ROLLING mill. *See* **Weissenborn,** G. American engineering.

——— stock. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 18.**

Roloff, J. F. Der Elektromagnetismus insbesondere als Triebkraft. 8°. *Berlin*, 1868.

Roma, Giorgio di. Manuel simplifié de l'accordeur; ou l'art d'accorder le piano. 2e éd. *Illus.* 18°. *Paris*, 1834. **25 Manuels Roret.**

ROMAN biography and mythology, Dictionary of. *See* **Smith,** W.

Digitized by Google

ROMAN biography, mythology and the fine arts. *See* **Anthon**, Charles.

——— court, including the antique sculpture in the nave erected in the Crystal palace. *See* **Scharf**, George, *jr.* **Crystal palace library, v. 1.**

——— inscriptions. Siglarium Romanum. *See* **Gerrard**, John.

——— law, An introduction to the study of the. *See* **Cushing**, Luther S.

——— military service. Militia Romana. *See* **Lipsius**, Justus.

——— villas of the Augustan age, An essay on the. *See* **Moule**, Thomas.

——— wall, The. *See* **Bruce**, John Collingwood.

ROMANESQUE art. The Byzantine and Romanesque court in the Crystal palace. *See* **Wyatt**, M. D., and **Waring**, J. B. **Crystal palace library, v. 2.**

Romberg, J. Andreas. Der Treppenbau in Holz, oder practische Anleitung zur Construction der Treppen in Holz; für Zimmerleute, Tischler und Baubeflissene. fol. *Glogau*, 1860.

ROME. Arts, manufactures, manners and institutions of the Romans. *See* **Fosbrooke**, T. D. **Lardner's cabinet cyclopædia, v. 45, 46.**

——— Fall of the Roman empire; comprising a view of the invasion and settlement of the barbarians. *See* **Simonde de Sismondi**, J. C. L. **Lardner's cabinet cyclopædia, v. 43, 44.**

——— History of. *See* **History. Lardner's cabinet cyclopædia, v. 41, 42.**

——— Topography of, and its vicinity. *See* **Gell**, *Sir* W.

Ronalds, Edmund. Chemical technology; or chemistry applied to the arts and manufactures; ed. by. *See* **Knapp**, F.

——— Journal of the London chemical society; ed. by. *See* LONDON. **Chemical society.**

——— and **Richardson**, Thomas. Chemical technology; or chemistry applied to the arts and manufactures; with which is incorporated a revision of Knapp's technology. v. 1, parts 1-2. Fuel and its applications. 3-4. Acids, alkalies, and salts, their manufacture and applications. [Parts 3, 4, by Thomas Richardson and Henry Watts.] *Illus.* 2d ed. 8°. *London*, 1855-65.

Rondel, F. Handbook of modeling, sculpture, and moulding: transl. from the French. 8°. *New York*, 1868.

Rondelet, Jean. Traité théorique et pratique de l'art de bâtir. T. 1-5. Avec atlas. 7e éd. 4°. *Paris*, 1834.

Rondonneau, L. Manuel du practicien; revu par. *See* **D., M. 1 Manuels Roret.**

ROOFING. Der vollkommene Dachdecker. *See* **Matthaeÿ**, C. L. **61 Neuer Schauplatz der Künste.**

——— A description of the latest and most approved systems of zinc-roofing. *See* **Zinc-roofing.**

——— Musterzeichnungen von Dachdecker-Werkzeugen. *See* HESSE-DARMSTADT.

ROOFS. Art du couvreur. Par H. L. Duhamel du Monceau. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 14 and 4.**

——— Bau der Dorn'schen Lehmdächer nach eigenen Erfahrungen. *See* **Linke**, Gustav.

——— Carpentry and joinery of. *See* **Robison**, J., **Price**, —, and **Tredgold**, T. **Weale's series, No. 123.**

——— Costruzione dei tetti degli edificj. *See* **Merlini**, Giovanni.

——— Examples for. *See* **Trendall**, E. W.

——— Holzverbindungen, insbesondere Dachconstructionen. *See* **Rössler**, H.

——— Iron roof of the new houses of parliament. **Weale's papers on engineering, v. 3.**

——— Manuel du couvreur. *See* **Toussaint. 83 Manuels Roret.**

——— Specimens of various ancient and modern roofs. By P. Barlow. *See* **Tredgold**, T. Principles of carpentry.

Roorbach, Orville A. Bibliotheca Americana. Catalogue of American publications, including reprints and original works, from 1820 to 1852: with a list of periodicals published in the United States; compiled and arranged by. 8°. *New York*, 1852.

——— ——— Supplement from October, 1852, to May, 1855, including a repetition of such books as have either changed prices or publishers during that period. 8°. *New York*, 1855.

——— ——— (Supplement.) Addenda from May, 1855, to March, 1858. 8°. *New York*, 1858.

Digitized by Google

Roorbach, Orville A. Bibliotheca Americana. (Supplement.) Vol. 4 of the Bibliotheca Americana, from March, 1858, to January, 1861. 8°. *New York*, 1861.

Root, Marcus A. The camera and the pencil, or the heliographic art, its theory and practice; with its history in the United States and Europe. *Illus.* 8°. *Philadelphia*, 1864.

Root, N. W. Taylor. School amusements, or how to make the school interesting; embracing rules for military and gymnastic exercises, and hints upon the general management of the school room. 8°. *New York*, 1866.

ROPE making. Das Seiler-Handwerk. *See* **Wölfer, M. 91 Neuer Schauplatz der Künste.**

——— ——— Treatise on. *See* **Chapman,** R.

Roper, Stephen. A catechism of high pressure or non-condensing steam engines, including the modeling, constructing, running and management of steam engines and boilers. 24°. *Philadelphia*, 1874.

Ropes, Joseph. Linear perspective, for the use of schools and students in drawing. 8°. *Portland*, 1849.

——— Practical perspective; a sequel to linear perspective. 8°. *Portland*, 1851.

Roquefort, B. de. Vues des monumens français: descriptions par. *See* **Réville, Lavallée,** and **Roquefort,** B. de.

Roques, Joseph. Phytographie médicale; histoire des substances héroïques et des poisons tirés du régne végétal. T. 1–3 avec atlas. 8° and fol. *Paris, Lyon*, 1835.

Roret, A. [**Manuels Roret.**] Les manuels des sciences, des arts et métiers, de la librairie encyclopédique de Roret. 124 v. 18°. *Paris*, 1833–56.

1. Manuel du practicien, ou traité de la science de droit. L. Rondonneau. 1834.
2. Manuel de médecine et de chirurgie domestiques. J. Morin. 1833.
3. Manuel de pharmacie populaire. Julia de Fontenelle. T. 1–2. 1830.
4. Manuel de chime, suivi d'un dictionnaire de chimie. A. D. Vergnaud. 1834.
5. Manuel de physique. C. Bailly. *Illus.* 1836.
6. Manuel de chimie amusante. De l'anglais de F. Accum et autres, par A. D. Vergnaud. 1835.
7. Manuel du fabricant de produits chimiques. L. S. Thillaye. T. 1–2. 1829.

Roret, A.—Continued.

8. Manuel de géometrie. O. Terquem. *Illus.* 1835.
9. Manuel d'algèbre. O. Terquem. 1836.
10. Manuel d'astronomie. C. F. Bailly. *Illus.* 1830.
11. Manuel de géographie. Alexdr. de Villiers. *Illus.* 1835.
12. Manuel de la construction et du dessin des cartes géographiques. Perrot. *Illus.* 1830.
13. Manuel de géographie physique, historique et topographique de la France. V. A. Loriol. 1836.
14. Manuel d'équitation à l'usage des deux sexes. A. D. Vergnaud. *Illus.* 1834.
15. Manuel d'arithmétique démontrée et complémentaire. Collin et Trémery. T. 1–2 1836.
16. Manuel complet de mythologie. N. A. Dubois. 1836.
17. Manuel du naturaliste préparateur, ou l'art d'empailler les animaux, et de conserver les végétaux et les minéraux. Boitard. *Illus.* 1835.
18. Manuel des contrepoisons et autres moyens curatifs, suivi des moyens de rappeler la vie en mort apparente. Hector Chaussier. 1836.
19. Manuel d'optique. De l'anglais de Brewster par P. Vergnaud. T. 1–2. *Illus.* 1833.
20. Manuel de perspective, du dessinateur et du peintre. A. D. Vergnaud. *Illus.* 1835.
21. Manuel du peintre et du sculpteur. L. C. Arsenne. Notices sur les manuscrits à miniatures, par F. Denis. T. 1–2. 1833.
22. Manuel de sténographie. H. Prévost.
23. Manuel du mouleur. Lebrun.
24. Manuel du dessinateur. A. M. Perrot et A. Vergnaud. 1836.
25. Manuel de l'accordeur, ou l'art d'accorder le piano. Giorgio di Roma. *Illus.* 1834.
26. Manuel du graveur, ou l'art de la gravure en tous genres. A. M. Perrot. 1830.
27. Manuel de physique amusante. Julia de Fontenelle. *Illus.* 1836.
28. Manuel du banquier, de l'agent de change, et du courtier. Peuchet. 1829.
29. Manuel de l'artificier, ou l'art de faire toutes sortes de feux d'artifice. A. D. Vergnaud. 1828.
30. Manuel d'architecture, ou traité de l'art de bâtir. Toussaint. T. 1–2. *Illus.* 1832.
31. Manuel de mécanique, ou les lois d'équilibre et le mouvement des corps solides. O. Terquem. 1836.
32. Manuel nouveau de typographie; les principes de l'imprimeur-typographe. A. Frey. T. 1–2. *Illus.* 1835.
33. Manuel du charron et du carrossier. Lebrun. T. 1–2. 1832.
34. Manuel complet du boulanger, du négociant en grains, du meunier, et du constructeur de moulins. Benoit et Julia de Fontenelle. T. 1–2. *Illus.* 1836.
35. Manuel du porcelainier, du faiencier et du potier de terre; suivi de l'art de fabriquer les poêles, les pipes, les carreaux, les briques et les tuiles. Boyer. T. 1–2. 1827.

Digitized by Google

Roret, A.—Continued.

36. Manuel complet du bijoutier, du joaillier, de l'orfèvre, du graveur sur métaux et du changeur. Julia de Fontenelle. T. 1-2. *Illus.* 1832.
37. Manuel du fabricant de papier. T. 1-2. L. S. Le Normand. 1833.
38. Manuel complet du maître de forges, ou l'art de travailler le fer. H. Landrin. T. 1-2. *Illus.* 1829.
39. Manuel complet du fondeur en tous genres, faisant suite au manuel du travail des métaux. J. B. Launay et A. D. Vergnaud. T. 1-2. 1836.
40. Manuel complet du blanchiment et du blanchissage, nettoyage et dégraissage. Julia de Fontenelle. T. 1-2. 1834.
41. Manuel du toiseur en bâtimens. Lebossu. T. 1-2. *Illus.* 1832.
42. Manuel d'arpentage. S. F. Lacroix. 1834. Manuel supplémentaire d'arpentage. Hogard et Henri Hogard. T. 1-2. *Illus.* 1836.
43. Manuel de l'herboriste, de l'épicier-droguiste et du grainier-pépinieriste horticulteur. Julia de Fontenelle et Henri Tollard. T. 1-2. 1828.
44. Manuel du cultivateur français. Thiébaut de Berneaud. T. 1-2. 1829.
45. Manuel du cultivateur-forestier. Boitard. T. 1-2. 1834.
46. Manuel du travail des métaux. De l'anglais de Lardner par A. D. Vergnaud. T. 1-2. *Illus.* 1835.
47. Manuel du menuisier en meubles et en bâtimens, suivi de l'art de l'ébéniste. Nosban. T. 1-2. *Illus.* 1835.
48. Manuel complet du jardinier, ou l'art de cultiver et de composer des jardins fruitiers, potagers, fleuristes et d'agrément. C. Bailly. T. 1-2. *Illus. n. d.*
49. Manuel du tourneur. Dessables. T. 1-2. *Illus.* 1831.
50. Manuel du chaufournier. V. Biston. 1836.
51. Manuel du luthier. J. C. Maugin. *Illus.* 1834.
52. Manuel du coutelier. H. Landrin. *Illus.* 1835.
53. Manuel du négociant et du manufacturier. Peuchet. 1829.
54. Manuel du ferblantier et du lampiste, suivi d'un vocabulaire des termes techniques. Lebrun. *Illus.* 1830.
55. Manuel du charcutier. Mme. Celnart. 1827.
56. Manuel du peintre en bâtimens, fabricant de couleurs, du vitrier, du doreur, du vernisseur, et de l'argenteur. A. D. Vergnaud. 1836.
57. Manuel du bottier. J. Morin. T. 1-2. 1831.
58. Manuel du vigneron français, et l'art de faire les vins, eaux-de-vie et vinaigres. Thiébaut de Bernaud. *Illus.* 1836.
59. Manuel du limonadier et du confiseur. Cardelli et J. Lionnet-Clémandos. *Illus.* 1835.

Manuel complet du teneur de livres. Trémery. 1836.

Manuel du bourrelier. Lebrun. 1833.

Roret, A.—Continued.

62. Manuel complet des marchands de bois et de charbons. E. B. Marié de L'Isle. *Illus.* 1835.
63. Manuel du sommelier, ou l'instruction sur la manière de soigner les vins. A. Jullien. *Illus.* 1836.
64. Manuel du chandelier, du cirier, et du fabricant de cire à cacheter. L. S. Le Normand. *Illus.* 1836.
65. Manuel du relieur, de l'assembleur, du satineur, de la plieure, de la brocheuse, du marbreur et du doreur. L. S. Le Normand. *Illus.* 1831.
66. Manuel du poêlier fumiste. Ardenni et Julia de Fontenelle. 1835.
67. Manuel du serrurier. B... et G..., De Grandpré et D... *Illus.* 1836.
68. Manuel de musique. A. E. Choron et J. A. De Lafage. *Illus. n. d.*
69. Manuel des habitants de la campagne et de la bonne fermière, ou traité de l'économie rurale et domestique. Mme. Celnart. *Illus.* 1834.
70. Manuel complet des marchands de vins, des débitants de boissons et du jaugeage. Laudier et D... 1836.
71. Manuel complet du teinturier. A. D. Vergnaud. 1836.
72. Manuel pratique des constructions rustiques. De Fontenay. *Illus.* 1836.
73. Manuel complet du vétérinaire, suivi de l'art d'équitation. Lebaud. *Illus.* 1833.
74. Manuel du fabricant de gants, dans ses rapports avec la mégisserie, la chamoiserie et les opérations de teinture qui s'y rattachent. Vallet d'Artois. 1835.
75. Manuel complet du treillageur et du menuisier des jardins. Paulin Desormeaux. *Illus.* 1836.
76. Manuel du charpentier. Traité complet de cet art. P. A. Hanus et V. Biston. *Illus.* 1834.
77. Manuel du fabricant d'indiennes, et la description botanique et chimique des matières colorantes. L. J. S. Thillaye. 1834.
78. Manuel du parfumeur. La description des huiles et pommades, des poudres; crêmes et laits cosmetiques; pâtes; fards et dentrifices; eaux de cologne et parfums; pastilles; vinaigres et savons odorans. Mme. Celnart. *Illus.* 1834.
79. Manuel du fabricant et de l'épurateur d'huiles, suivi d'un aperçu sur l'éclairage par le gaz. Julia de Fontenelle. *Illus.* 1836.
80. Manuel du fabricant et du raffineur de sucre de cannes, de betteraves, et de diverses substance végétales et animals susceptibles d'en produire; contenant la culture de la canne et de betteraves. Blachette et Zoéga; Julia de Fontenelle. *Illus.* 1833.
81. Manuel complet du distillateur et du liquoriste. Fabrication d'eau-de-vie et esprits, des liqueurs, marasquins et ratafias, des huiles essentielles, des eaux spiritueuses; des vins de liqueur et des vinaigres aromatiques. Lebaud et Julia de Fontenelle. *Illus.* 1835.

Digitized by Google

Roret, A.—Continued.

82. Manuel du cuisinier et de la cuisinière. Précédé d'un traité pour bien découper et servir les viandes; sur le choix et la conservation des substances alimentaires et sur les vins. Cardelli. *Illus.* 1836.
83. Manuel du maçon-plâtrier, du carreleur, du couvreur et du paveur. Toussaint. *Illus.* 1834.
84. Manuel du constructeur de chemins de fer. Essai sur les principes généraux de l'art de construire les chemins de fer. Ed. Biot. *Illus.* 1834.
85. Manuel du cartonnier, du cartier et du fabricant de cartonages; suivi des lois relatifs à l'art de cartier et d'un vocabulaire des termes techniques. Lebrun. *Illus.* 1830.
86. Manuel du tailleur. Manière de tracer, couper et confectionner les vêtemens. Notice sur les outils du tailleur et les étoffes pour les vêtemens. Vandael. 1833.
87. Manuel du pêcheur, ou traité de toutes sortes de pêches. Histoire des poissons, la manière de pêcher chaque espèce; art de fabriquer les filets; traité sur les étangs. Peuson-Maisonneuve. *Illus.* 1836.
88. Manuel du fleuriste artificiel, suivi de l'art du plumassier. Mme. Celnart. *Illus.* 1829.
89. Manuel du pâtissier, suivi d'un vocabulaire explicatif des termes de cet art. Le Blanc. *Illus.* 1834.
90. Manuel complet des propriétaires d'abeilles suivi de l'art d élever et de soigner les vers à soie et de cultiver le mûrier. Morin. 1828.
91. Manuel de miniature et de gouache, suivi du manuel du lavis à la sépia et de l'aquarelle. St. F. Constant-Viguier et F. P. Langlois-Longueville. *Illus.* 1836.
92. Manuel de l'électricité atmosphérique, comprenant les instructions pour établir les paratonnerres es les paragrêles. De l'anglais de John Murray par Anatole Riffault. 1831.
93. Manuel du mécanicien fontainier, pompier, plombier, théorie des pompes ordinaires et rotatives, des machines hydrauliques; leur application à la navigation sous-marine, à un mode de nouveau réfrigérant; l'art de plombier et les appareils de cette industrie. Janvier. *Illus.* 1835.
94. Manuel du jardinier des primeurs, ou l'art de forcer les plantes à donner leurs fruits ou fleurs dans toutes les saisons. Noisette et Boitard. *Illus.* 1832.
95. Manuel du coloriste, ou l'instruction pour l'enluminure le lavis et la retouche des gravures, images, etc. A. M. Perrot et E. Blanchard. *Illus.* 1834.
96. Manuel complet des fabricans de chapeaux en tous genres. Cluz . . . et F . . . et Julia de Fontenelle. 1830.
97. Manuel du bouvier et du zoophile, ou l'art d'élever et de soigner les animaux domestiques. Par un propriétaire-cultivateur. 1836.
98. Manuel du bonnetier et du fabricant de bas. Leblanc et Préaux-Caltot. *Illus.* 1830.

Roret, A.—Continued.

99. Manuel du vinaigrier et du moutardier suivi de recherches sur la fermentation vineuse. Julia de Fontenelle. *Illus.* 1836.
100. Manuel du tapissier décorateur et marchand de meubles. Garnier-Audiger. *Illus.* 1830.
101. Manuel complet du verrier et du fabricant de glaces, cristaux, pierres précieuses factices, verres colorés, yeux artificiels. Julia de Fontenelle. 1829.
102. Manuel du fabricant de cidre et de poiré, suivi de l'art de faire les vins de fruits, de composer des arômes, et de faire avec les raisins de tous les vignobles, soit les vins de Basse-Bourgogne, de Tourraine, de Bordeaux et autres. L. F. Dubief. *Illus.* 1834.
103. Manuel du fabricant d'étoffes imprimées et de papiers peints. L. S. Le Normand. *Illus.* 1830.,
104. Manuel de l'horloger, ou guide des ouvreurs qui s'occupent de la construction des machines propres à mesurer le temps. L. S. Le Normand. *Illus.* 1830.
105. Manuel du brasseur, ou l'art de faire toutes sortes de bières. De l'anglais de Fr. Accum, par Riffault et A. D. Vergnaud. 1828.
106. Manuel de l'armurier, du forbisseur, et de l'arquebusier. A. Paulin-Desormeaux. 1832.
107. Manuel complet du marchand papetier et du régleur. Connaissance des papiers divers; fabrication des crayons, des encres; préparation des plumes, des pains et de la cire à cacheter, de la colle à bouche, des sables, etc. Julia de Fontenelle et P. Poison. 1828.
108. Manuel de l'amidonier et du vermicellier. Fabrication des produits avec la pomme de terre, les marrons d'Inde, les châtaignes et les autres substances amilacées ou féculantes. Morin. *Illus.* 1830.
109. Manuel des poids et mesures, des monnaies et du calcul décimal. Tarbé des Sablons. 1833.
110. Manuel du destructeur des animaux nuisibles à l'agriculture, au jardinage, à l'économie domestique, etc. Verardi. 1834.
111. Manuel de calligraphie. Méthode de Carstairs. L'art d'écrire en peu de leçons. Trémery. 1829.
112. Manuel complet de la laiterie. Méthodes pour tirer parti du lait, faire le beurre, confectionner les fromages. Thiébaut-Bernaud. *Illus.* 1842.
113. Manuel de marine. 1e partie: Gréement. 2e partie: Manœuvres du navire et de l'artillerie. Verdier. T. 1-2. 1837.
114. Manuel du fabricant d'objets en caoutchouc, en gutta-percha et en gomme factice; suivi de traité sur la fabrication des tissus imperméables, des toiles cirées et des cuirs vernis. P. Desormaux. 1835.
115. Répertoire générale de la photographie. E. de Latreille. 1855.
116. Manuel du dessinateur et de l'imprimeur lithographe. L. Brégeaut. 1827.

Digitized by Google

Roret, A.—Continued.

117. Manuel d'économie domestique. Mme. Colnart. *Illus.* 1829.
118. Manuel du tanneur, du corroyeur, et de l'hongroyeur. Chicoineau. *Illus.* 1826.
119. Manuel du savonnier. Mme. Gacon-Dufour. 1827.
120. Manuel du chasseur. De Mersan. 1828.
121. Manuel d'hygiène, ou l'art de conserver sa santé. Morin. 1827.
122. Manuel du destructeur des animaux nuisibles. Vérardi. 1833.
123. Manuel du fabricant et du raffineur de sucre. Blachette, Zoéga et Julia de Fontenelle. 1833.
124. Manuel complet du physicien-préparateur et de l'amateur, ou description d'un cabinet de physique. Fau et Chevalier. T. 1-2. *Illus.* 1853.

Roscoe, Henry. Lives of eminent British lawyers. 16°. *London.* **Lardner's cabinet cyclopædia, v. 75.**

Roscoe, Henry Enfield. On coal colors. **Science lectures for the people, series 3.**

——— Four lectures on elementary chemistry. 1. Indestructibility of matter and of energy. 2. Chemical combination. 3. Sulphur, sulphuric acid, soda, soap, bleaching. 4. Carbon, coal, flame. **Science lectures for the people, series 1.**

——— John Dalton and his atomic theory. **Science lectures for the people, series 6.**

——— Spectrum analysis. **Science lectures for the people, series 2.**

——— Spectrum analysis. Six lectures, delivered before the Society of apothecaries of London in 1868. 8°. *London,* 1869.

Rose, Heinrich. Ausführliches Handbuch der analytischen Chemie. 2 Bde. 8°. *Braunschweig,* 1851.

——— A practical treatise of chemical analysis, including tables for calculations in analysis. v. 1. Qualitative. 2. Quantitative. Transl. from the French and 4th German ed.; with notes, by A. Normandy. 2 v. 8°. *London,* 1848-49.

——— Tabulæ atomicæ. Chemical tables for the calculation of quantitative analysis. Recalculated, with additions, by William P. Dexter. 8°. *Boston,* 1850.

——— Traité pratique d'analyse chimique; traduit de l'allemand, sur la 4e éd., par A. J. L. Jourdan; accompagné de notes et additions, par E. Péligot. 8°. *Paris,* 1843.

Rose, Hugh James. A new general biographical dictionary, projected and partly arranged by. 12 v. 8°. *London,* 1853.

Roseleur, Alfred. Manipulations hydroplastiques, guide du doreur, de l'argenteur et du galvanoplaste. *Illus.* 8°. *Paris,* 1855.

Rosengarten, A. A handbook of architectural styles. Transl. from the German, by W. Collett-Sandars. *Illus.* 8°. *New York,* 1876.

Rosenkrantz (Der) Marie; der beschlossen Gart. 2 Bde. fol. *Nürmberk,* 1505.

ROSES. The American rose culturist; a practical treatise on the propagation, cultivation and management of the rose, in all seasons. To which are added, directions for the treatment of the dahlia. *Illus.* 12°. *New York,* 1852. **Saxton's cottage and farm library.**

——— The book of. *See* **Parkman,** Francis.

——— A treatise on the rose. *See* **Parsons,** Samuel B.

Roosevelt, Robert B. Superior fishing, or the striped and black bass, and trout of the northern states; with directions for dressing artificial flies with feathers of American birds. Sporting visit to Lake Superior. 12°. *New York,* 1865.

Rösling, Carl Wilhelm. Gründliche Eröffnung für Zuckerraffinerien. Praxis in der Fabrikation des Beinschwarzes, Ammoniak, Salmiak, Glaubersalz, Phosphors, der Phosphorsäure, des blausauren Kalis, Pariser- und Berlinerblaus. Auch Banplan einer Fabrik in 14 Baurissen. 8°. *Weimar,* 1836. **86 Neuer Schauplatz der Künste.**

——— Das Kupferschmiedhandwerk. *See* **Höhne,** F., and **Rösling,** C. W. **101 Neuer Schauplatz der Künste.**

Rosny, Léon de. Revue orientale et américaine, publiée, avec le concours de membres de l'Institut, de diplomates, de savants, de voyageurs, etc. T. 3me. 8°. *Paris,* 1860.

Ross, John M. The globe encyclopædia of universal information; ed by. v. 1-2. *Boston,* 1876.

Ross, Owen C. D. Air as fuel. 12°. *London,* 1874.

Rosse, J. Willougby. Blair's chronological tables; rev. by. *See* **Blair,** John.

Rössler, Hektor. Anleitung zur Konstruction und Ausführung von Feuer-

Digitized by Google

Rössler, Hektor—Continued.
ungs-Anlagen. Hrsg. von. *Illus.* 4°. *Darmstadt,* 1856. pp. 18, pl. 18. **Vorlegeblätter** für Handwerkszeichenschulen und zum Privatgebrauch, 5te Abth.

——— Arbeiten des Bautischlers. Hrsg. von. 4°. *Darmstadt,* 1845–47. pp. 24, pl. 30. **Vorlegeblätter** für Handwerkszeichenschulen und Privatgebrauch, 7te Abth.

——— Architektonische Glieder für Gurten, Gesimse, Fenster und Thüreinfassungen, nebst der Lehre vom Steinschnitt, etc. 4°. 2te Aufl. *Darmstadt.* pp. 10, pl. 30. **Vorlegeblätter** für Handwerkszeichenschulen und Privatgebrauch, 3te Abth.

——— Bericht über die von dem Gewerbverein für das Grossherzogthum Hessen im Jahre 1843 veranstaltete allgemeine deutsche Industrie-Austellung zu Mainz. 4°. *Darmstadt,* 1843.

——— Darstellende Geometrie. 4°. *Darmstadt,* 1847. pp. 27, pl. 30. **Vorlegeblätter** für Handwerkszeichenschulen und zum Privatgebrauch, 2te Abth.

——— Erste Elemente des geometrischen Zeichnens, und Uebungen im Linearzeichnen. 2te Aufl. 4°. *Darmstadt.* pp. 15, pl. 26. **Vorlegeblätter** für Handwerkszeichenschulen und zum Privatgebrauch, 1ste Abth.

——— Holzverbindungen, insbesondere Dachconstructionen. 2te Aufl. 4°. *Darmstadt,* 1855. pp. 11, pl. 40. **Vorlegeblätter** für Handwerkszeichenschulen und zum Privatgebrauch, 4te Abth.

——— Monatsblatt des Groszherzoglich Hessischen Gewerbvereins. 4 Bde. 8°. *Darmstadt,* 1845-48. [From B. 5 name changed to Gewerbeblatt.] *See* HESSE-DARMSTADT.

——— Sammlung technischer Hülfsmittel. Beigabe zum Monatsblatte des Groszherzoglich Hessischen Gewerbvereins. 4 Bde. 8°. *Darmstadt,* 1843-49.

——— and **Fink,** Franz. Arbeiten des Schlossers. 4°. *Darmstadt,* 1844-45. pp. 28 + 8, pl. 36. **Vorlegeblätter** für Handwerkszeichenschulen und zum Privatgebrauch, 6te Abth.

Rossmässler, E.A. Naturgeschichtlicher Unterricht. Vorschläge zu einer Umgestaltung desselben. 16°. *Leipzig,* 1860.

Rosthorn, Gustav v. Kupfer- etc. Erzeugnisse. Stahl- und Eisenwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

ROTASCOPE, Description of the. *See* **Johnson,** W. R.

Roth, K. de. Agenda für den Photographen; hrsg. von. *See* **Kruger,** J., and **Spamer,** Otto.

Roth, Ludwig. Die Kesselsteinbildung und Verhütung derselben. 8°. *Berlin,* 1872.

Roth, Theodor. Kapital und Arbeit; uebers. von. *See* **Knight,** Charles. **Wochenbände, 69–73.**

Rothamsted (The) memoirs on agricultural chemistry and physiology; by John B. Lawes and Joseph H. Gilbert. 2 v. 8°. *London,* 1863. [†]

——— ——— Researches on the chemistry of animal and vegetable growth; by John B. Lawes and Joseph H. Gilbert. 4°. *London,* 1860. [†]

Rother, L. F. W. Der Telegraphenbau. Ein Handbuch zum praktischen Gebrauch für Telegraphen-Techniker und Beamte. Bearbeitet nach. *Illus.* 8°. *Berlin,* 1865. 4te Aufl., 1876.

Rothmaler, Friedrich. Handbuch der Kochkunst; hrsg. v. *See* **Heith,** F. W. **13 Neuer Schauplatz der Künste.**

Rothman, R. W. History of astronomy, by. LONDON. **Society of useful knowledge, v. 3.**

Rothschild, L. Taschenbuch für Kaufleute, insbesondere für Zöglinge des Handels. Enthaltend das Ganze der Handelswissenschaft in gedrängter Darstellung. Hrsg. unter Mitwirkung von P. Barnewitz, O. Delitsch, J. Engelmann, u. m. A.; 19te, durchgehende auf Grund der neuen Reichswährung sowie der neuen Masse und Gewichte umgearbeitete und vermehrte Auflage. *Illus.* 8°. *Leipzig,* 1875.

Röting, G. E. Civilingenieur; hrsg. v. *See* **Civilingenieur.**

ROTTERDAM. Improvement of navigation from Rotterdam to the sea. Report, by J. G. Barnard. *See* UNITED STATES. **War department.**

Roubier, Benoit. Mémoire sur un mécanisme destiné à prévenir les accidents sur les chemins de fer. 4°. *n. t. p.* pp. 6, pl. 1.

Digitized by Google

Roubo, Jacques André. Art du layetier, par. PARIS. **Acad roy. des sc.; arts et métiers, v. 19.**

——— Art du menuisier, par. PARIS. **Acad. roy. des sc; arts et métiers, v. 15-19.**

——— Construction des théâtres et des machines théâtrales, par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 43.**

ROUEN. Académie impériale des sciences, belles-lettres et arts de Rouen. Précis analytique des travaux pendant l'année 1866-67. 8°. *Rouen et Paris*, 1867.

Rouget de Lisle, —. Dictionnaire des arts, etc. *See* **Laboulaye,** C. P. S.

——— Notice historique, théorique et pratique sur le blanchissage du linge de toile, de la flanelle de santé et des divers vêtements; précédée du rapport sur les concours de 1850 relatifs aux perfectionnements des appareils et des procédés du blanchissage du linge, par Herpin. 4°. *Paris*, 1852.

ROUMANIA. Rumaenien; von Baron Ernst Haan. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Rounne, Charles. L'art de la mâture, par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 45.**

——— L'art de la voilure, par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 45.**

Rousseau, Jean-Jacques. A complete dictionary of music; a copious explanation of all words necessary to a true knowledge and understanding of music. Transl. from the French of, by William Waring. 2d ed. 8°. *London, Dublin*, 1779.

Rousseau, Levi. Opinion of Mr. Justice Woodbury in the case of Wilson vs. Rousseau and Easton. *See* **Woodbury,** L.

Routh, E. J. Analytical view of Newton's Principia, by. *See* **Brougham,** H., and **Routh,** E. J.

Routledge, Edmund. Every boy's annual, an entertaining miscellany of original literature. *Illus.* 2 v. 8°. *London*, 1868-69.

Rouvroy, W. H. von. Études sur la théorie du tir des armes à feu rayées. Trad. par Rieffel. *Illus.* 8°. *Paris*, 1860.

Row, Augustus. Masonic biography and dictionary; comprising the history of ancient masonry, antiquity of masonry, written and unwritten law; derivation and definition of masonic terms; biographies of eminent masons; statistics; list of all the lodges in the United States, etc.; compiled by. 12°. *Philadelphia*, 1868.

Rowan, F. J. On boiler incrustations and corrosions. 8°. *New York*, 1876. **Van Nostrand's science series, No. 27.**

Rowbotham, Thomas. The art of landscape painting in colours. 22d ed. 18°. *London*, 1866.

Rowe, Jacob. Navigation improved. Book 1. The fluid quadrant for the latitude. Book 2. Discovery of longitude by a new invention of an everlasting horometer. 8°. *London*, 1725. pp. 43.

Rowe, John. An introduction to the doctrine of fluxions. 4th ed., with additions, by William Davis. 8°. *London*, 1869.

Rowe, Willis. Milk sickness; its cause discovered and explained. 16°. *Springfield, Ill.*, 1867. pp. 37.

Rowell, G. A. On the ventilation of public sewers; with special reference to those of Oxford. 8°. *Oxford*, 1865. pp. 16.

Rowett, W. The ocean telegraph cable: its construction, submersion and regulation of specific gravity explained. *Illus.* 8°. *London*, 1865.

Rowlandson, T. S. History of the steam hammer. A lecture delivered at the Mechanics' Institution, Patricroft. 2d ed. 8°. *Eccles*, 1865.

Rowning, J. A compendious system of natural philosophy: with notes, containing the mathematical demonstrations, and some occasional remarks. 4 parts. 8th ed. 2 v. 8°. *London*, 1779.

ROYAL college of physicians. Pharmacopoeia collegii regalis medicorum Londinensis. *See* LONDON.

——— engineers. Papers on subjects connected with the duties of the corps of royal engineers. v. 1-10. 4°. *London*, 1839-49. [v. 1 and 2 are 2d ed.]

——— household of England. A collection of ordinances and regulations for the government of the royal household. *See* LONDON. **Society** of antiquaries.

——— institution of Great Britain, Journal of science and the arts; ed. at the. *See* LONDON. **Royal** institution.

Digitized by Google

Royal jeu de l'ombre et du piquet, augmentez du jeu des eschets, et d'un nouveau jeu de l'ombre, comme on le joüe présentement à la cour et à Paris; et autres nouvellement inventés. 24°. *La Haye*, 1712.

——— Scottish society of arts. Transactions. v. 1-7. 8°. *Edinburgh*, 1841-68. [Imperfect.]

——— society of London. *See* LONDON.

——— ——— of Van Diemen's Land. Proceedings. *See* HOBART TOWN.

Royle, J. Forbes. The arts and manufactures of India. *See* **Lectures** on the results of the exhibition.

——— Essay on the productive resources of India. 8°. *London*, 1840.

——— The fibrous plants of India, with an account of the cultivation and preparation of flax, hemp and their substitutes. 8°. *London*, 1855.

Rozier, —. Nouveau cours d'agriculture sur le plan de celui de Rozier. *See* **Nouveau.**

RUBBER, Hard, or vulcanite, for dental purposes. *See* **Wildman,** E.

Rubens, Ferdinand. Traité des maladies des arbres fruitiers, et des moyens de les prévenir et de les guérir. Trad. de l'allemand et augmenté d'observations, par Auguste Mall. 18°. *Paris et Metz*, 1848.

Rücker, —. Soap bubbles. *See* **Science lectures for the people, series 7.**

Rucker, James M. The sphere and cylinder; or a short treatise upon atmospheric phenomena, and other phenomena in nature relating to mechanics. 8°. *Lynchburg*, 1873.

Rückert, Friedrich. Synonymisches Handwörterbuch der deutschen Sprache, für alle, welche sich in dieser Sprache richtig ausdrücken wollen. 16°. *Berlin*, 1802.

RUDDER, Substitute for a lost. *See* **Pakenham,** E.

Rudel, Alwin. Central-Blatt für deutsche Papierfabrikation v. *See* **Central-Blatt.**

Rudel, Otto. Central-Blatt für deutsche Papierfabrikation, alphabetisches Register von. *See* **Central-Blatt.**

Rüdgisch, —, von. Die neueren Breithaupt'schen Messtisch- und Kippregel-Constructionen, und ihr Werth für die topographische Messkunst. 8°. *Cassel*, 1868.

Rudiments of the Greek language; arranged for the students of Loyola college, Baltimore; upon the basis of Wettenhall. 12°. *Baltimore*, 1855.

Rudolph, A. Die edlen Metalle und Schmucksteine. Ein praktisches Handbuch für Juweliere, Gold- und Silberarbeiter. 8°. *Breslau*, 1859.

Rueff. Encyklopädie der Landwirthschaft, bearb. von. *See* **Schnee,** G. H.

Rueff, A. Das Scheeren unserer Hausthiere. 12°. *Berlin*, 1873.

——— Zur Geschichte der Hufbeschlagkunde. Ein Programm ausgegeben bei Gelegenheit der Jahresprüfung an der Kgl. Württembergischen land- und forstwirthschaftlichen Academie Hohenheim, in Aug. 1864. 8°. *Stuttgart*, 1864.

Ruffin, Edmund. An essay on calcareous manures. 2d ed. 8°. *Shellbanks, Va.*, 1835. 5th ed. 1852. [Appended to 2d and 9th vols. of the Farmer's register.]

——— Essays on notes on agriculture. 12°. *Richmond, Va.*, 1855.

——— Farmer's register; containing an essay on calcareous manures. v. 10; No. 12, and supplement. 8°. *Petersburg, Va.*, 1842.

——— Farmer's register; ed. by. *See* **Farmer's register.**

Ruggles, Samuel B. Quantities of cereals in different countries. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Rühlmann, Christian Moritz. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

——— Hydromechanik. *Illus.* 8°. *Leipzig*, 1857.

RUHMKORFF coil. Notice sur l'appareil d'induction électrique de Ruhmkorff. *See* **Du Moncel,** Th.

RULES of the House of representatives. *See* **Barclay,** John M.

RUM. Manufacture and distillation of alcoholic liquors. *See* **Duplais,** *aîné et jeune.*

Rumford, *Count* [Benjamin Thompson], The complete works of. Published by the American academy of arts and sciences. v. 1. roy. 8°. *Boston*, 1870.

——— Essays political, economical and philosophical. New ed. 3 v. 8°. *London*, 1800-02.

——— Memoir of. *See* **Ellis,** George E.

Rumsey, James. The original steamboat supported. A reply to Rumsey's pamphlet. *See* **Fitch,** J.

Digitized by Google

Runkle, John D. Mathematical monthly, ed. by. *See* **Mathematical.**

——— Tables for determining the values of the coefficients in the perturbative functions of planetary motion. **Smiths'n contrib., v. 9.**

Rupp, I. Daniel. A collection of thirty thousand names, of German, Swiss, Dutch, French, Portuguese, and other immigrants in Pennsylvania. 12°. *Harrisburg*, 1856.

Ruppaner, Anthony. Report on medicine and surgery. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

Ruprecht, Rud. Bibliotheca chemica et pharmaceutica. Alphabetisches Verzeichniss der auf dem Gebiete der reinen, pharmaceutischen, physiologischen und technischen Chemie in den Jahren 1858 bis Ende 1870 in Deutschland und im Auslande erschienenen Schriften. 8°. *Göttingen*, 1872.

RURAL affairs, Dictionary of. *See* **Johnson, C. W.**

——— ——— Maison rustique du 19e siècle. *See* **Maison** rustique.

——— economy in its relations with chemistry, physics and meteorology. *See* **Boussingault, J. B.**

——— ——— Mémoires sur l'économie rurale. *See* **Valcourt,** L. P. de.

——— ——— Rapport sur les instrumens d'économie rurale ou domestique. *See* **Héricart de Thury,** L. E. F.

Rural handbooks. No. 1. The garden; a pocket manual of practical horticulture; or how to cultivate vegetables, fruits and flowers; embracing an exposition of the nature and action of soils and manures, the structure and growth of plants, etc., with a chapter on ornamental trees and shrubs. 12°. *New York*, 1858.

——— sports, British. *See* **Walsh,** Henry.

——— ——— An encyclopedia of. *See* **Blaine,** Delabere P.

——— studies, with hints for country places. *See* **Mitchell,** Donald G.

Ruschenberger, W. S. W. Elements of herpetology and of ichthyology, from the text of Milne-Edwards and Achille Comte. 16°. *Philadelphia*, 1845.

——— A lexicon of terms used in natural history. 12°. *Philadelphia*, 1850.

Rusius, Laurentius. Hippiatria sive Marescalia Laurentii Rusii ad Nicolaum sancti Hadriani diaconum cardinalem, in qua præter variorum morborum plurima ac saluberrima remedia, frenorum formæ excusæ sunt, vt nullum tam nouo oris vitio laborantem equum inuenias, cui non hinc occurrere facilime possis. 4°. *Lutetiæ (Paris)*, 1532.

Russell, C. Appendix to the 2d edition of the tannin process. 16°. [1865.]

——— The tannin process. 8°. *London*, 1861. 2d ed., 1865.

Russell, J. Scott. The fleet of the future in 1862; or England without a fleet. 2d ed. 8°. *London*, 1862.

——— The modern system of naval architecture. roy. fol. 3 v. *London*, [1865].

——— The nature, properties, and applications of steam, and steam navigation. From the 7th ed. of the Encyclopædia Britannica. 8°. *Edinburgh*, 1841. [Bound with Treatise on steam engine.]

——— Physical atlas, with cooperation of. *See* **Johnston, A. K.**

——— A treatise on the steam engine. From the 7th ed. of the Encyclopæ lia Britannica. *Illus.* 8°. *Edinburgh*, 1841.

Russell, William. Orthophony; or, the cultivation of the voice in elocution. 8°. *Boston*, 1847.

Russell and Erwin manufacturing co., New Britain, Conn. Descriptive catalogue and price list. 4°. *New York*, 1871.

——— Real bronze hardware for private residences and public buildings, made by. 4°. *New York and Boston*, 1870.

RUSSIA, Commentaries on the productive forces of. *See* **Tegoborski,** L. de.

——— History of. *See* **Bell,** Robert. **Lardner's cabinet cyclopædia, v. 52-54.**

——— Izvliechieniie iz Otchieta ministra Gosoudarstvenniikha Imoustchiestve. Za 1852-53 god. 8°. *S. Peterbourg*, 1853-54.

——— Russland, von Wilhelm v. Lindheim. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

——— Statistichieskiia tabletsii Rossiiskoi impierii, za 1856-i god, sostablenniia i islanniia, po rasporiajieniio ministra vnoutrennikhe diele, statistichieskime otdelome tsentralinago statistichieskago komiteta. 8°. *S. Peterbourg*, 1858.

Digitized by Google

RUSSIA. Studien über die innern Zustände, das Volksleben, und insbesondere die ländlichen Einrichtungen Russlands. *See* **Harthausen**, August F. v.

——— Wagons für den Eisenbahn-Train der Kaiserlich-Russischen Bahn Odessa-Kiew. *See* **Pflug**, F. A.

RUSSIAN language. New pocket dictionary of English and Russian. *See* **New**.

——— ——— Nouveau dictionnaire de poche, des langues russe, française, allemande, et anglaise, à l'usage de la jeunesse russe. *See* **Reiff**, Charles Philippe.

Ruttan, Henry. Ventilation and warming of buildings. To which is added a description of the ventilation of railway carriages, for both winter and summer. *Illus.* 8°. *New York*, 1862.

Rutter, J. O. N. Human electricity; the means of its development, illustrated by experiments, with additional notes. 12°. *London*, 1854.

Rutzky, Andreas. Artillerie-Lehre. Theorie und Praxis der Geschoss- und der Zünder-Construction. 8°. *Wien*, 1871.

Ryan, James. An elementary treatise on algebra; an appendix, by Robert Adrain. 4th ed. 8°. *New York*, 1838.

——— The new American grammar of the elements of astronomy; an improved plan. 3 books. 24°. *New York*, 1827.

Ryder, Alfred P. A treatise on economy of fuel; showing how it may be attained on board men-of-war steamers, and pointing out the considerations which should be carefully studied when engines are ordered for steamers of war, mail packets, etc. 8°. *London*, 1852.

RYE, Harbor of; by J. Meryon. **Weale's papers on engineering, v. 4.**

Ryerson, Egerton. Report of the schools in Upper Canada, 1855; by. *See* CANADA.

Ržiha, Franz. Eisenbahn Unter- und Oberbau. *See* VIENNA. **Gen.-Dir. der Weltaussst. 1873. Bericht. Gruppe 18.**

——— Lehrbuch der gesammten Tunnelbaukunst. B. 1. 4°. *Berlin*, 1867.

——— Die neue Tunnel-Baumethode in Eisen, angewendet bei den Tunnelbauten zu Naensen und Ippensen auf der herzog. Braunschw. Holzmindener Eisenbahn. *Illus.* 4°. *Berlin*, 1864.

S., F. Das Wasserglas, seine Bereitung und Anwendung im Allgemeinen. 12°. *Ratibor*, 1872.

S., F. L. The art of ornamental hair work. 16°. *London*, 1856.

Sa da Bandeira, *Vicomte* de. Faits et considérations relatives aux droits du Portugal sur les territoires de Molembo, de Cabinde et d'Ambriz et autres lieux de la côte occidentale d'Afrique, située entre le 5e degré, 12 minutes, et le 8e degré de latitude australe. 3 planches. 8°. *Lisbonne*, 1855.

Sabine, Edward. Cosmos; translated under the superintendence of. *See* **Humboldt**, F. H. A. v.

——— Terrestrial magnetism, by. *See* **Herschel**, J. F. W. **Manual** of scientific enquiry.

Sabine, Robert. The electric telegraph. 8°. *London*, 1867.

——— The history and progress of the electric telegraph, with description of apparatus. 2d ed. 12°. *London, New York*, 1869.

Sabonadière, William. The coffee planter of Ceylon; containing extracts and letters from other authority on the same subject. 8°. *Guernsey*, 1866.

Sacc, Frédéric. Éléments de chimie. [1re partie.] Minérale ou synthétique. (2e partie.) Organique ou asynthétique. 2 T. 8°. *Paris*, [1869–71.]

SACERDOTAL vestments. Anciens vêtements sacerdotaux, et anciens tissus conservés en France. *See* **Linas**, Charles de.

Sacks, L. Landwirthschaftliche Notizen über Acker-, Forst-, Garten- und Hauswirthschaft. 2 Bde. 12°. *Berlin*, 1861, 1862.

SACRED history and literature. Potter's Bible encyclopedia. *See* **Potter's.** [†]

Saddlery. Abridgments English Patents, No. 34.

——— Album der Musterzeichnungen für Sattler. *See* **Album.**

——— Art du sellier, par F. A. P. de Garsault. PARIS. **Acad. roy. des sc.; arts et métiers, v. 32 and 14.**

——— Handbuch des Sattlers. *See* **Cilliax**, J. C. **64 Neuer Schauplatz der Künste.**

——— hardware, Price list of. *See* Theberath, Charles M., and bro.

Digitized by Google

SADDLERY. Manuel du sellier. *See* **Lebrun. 61 Manuels Roret.**

——— Unterricht in dem Bau der Reitsättel. *See* **Schulze, F. 27 Neuer Schauplatz der Künste.**

——— Zeitschrift für Sattler. *See* **Voigt, B. F.**

SAFES. Fire and thief-proof depositories. *See* **Price, G.**

SAFFRON. Mémoire sur la culture du safran. *See* **Gasparin, — de.**

Sager, A. Pracht-Meubles neuesten Geschmacks in Salons und Palästen. Hrsg. von. l. fol. *Berlin. n. t. p.*

SAILING boat. *See* **Folkard,** H. C.

SAILS. Art de la voilure, par C. Romme. PARIS. **Acad. roy. des sc.; arts et métiers, v. 45.**

——— Rig for reducing and furling. *See* **Cole,** J. E.

——— rigging, masts, etc. **Abridgments English Patents, No. 73.**

——— Treatise on sails and sailmaking. *See* **Kipping,** R.

Saint-Ambrose. *See* **Ambrose.**

Saint-Ange, Walter de. Métallurgie pratique du fer; ou description des procédés de fabrication de la fonte et du fer, accompagnée de documens relatifs à l'établissement des usines, à la conduite et aux resultats des opérations. *Illus.* 4° et fol. *Paris,* 1835–38.

Saint-Aubin, —, de. Art du brodeur, par. PARIS. **Acad. roy des sc.; arts et métiers, v. 31 and 14.**

Saint Clair, Harriett. Dainty dishes. Receipts collected by. 5th ed. 12°. *Philadelphia,* 1866.

Sainte Claire Deville, Henri. L'aluminium; ses propriétés, sa fabrication et ses applications. 8°. *Paris,* 1859.

Sainte Fare Bontemps, —. Économie publique. Résumé de toutes les expériences faites pour constater la bonté du procédé proposé par Dejean pour la conservation illimitée des grains et farines. 8°. *Paris,* 1824. pp. 40.

SAINT GALL. Bericht über die Thätigkeit der St. Gallischen naturwissenschaftlichen Gesellschaft. Red. von Wartmann. Bericht, 1858–72. 8°. *St. Gallen,* 1860–73.

SAINT-GERMAIN, Chemin de fer atmosphérique de. *See* **Etienne,** C.

Saint-Hilaire, Isidore Geoffroy. Acclimation et domestication des animaux utiles. 4e éd. 8°. *Paris,* 1861.

St. John, *Mrs.* Horace. Audubon, the naturalist of the New World. His adventures and discoveries. 12°. *New York,* 1856.

SAINT LOUIS. Die Bessemeranlage auf der Vulcan-Hütte zu St. Louis. *See* **Wedding,** H.

——— Mercantile library association. 3d to 12th annual reports of the board of directors. Inaugural address of William Homes, and a fragment of A. Chouteau's journal. *St. Louis,* 1854–58.

——— Public school library. Classified and alphabetical catalogue of the books; including the collections of the Academy of science and the Law school; prepared by John Jay Bailey. roy. 8°. *St. Louis,* 1870.

ST. PETERSBURG. Kaiserliche Akademie der Wissenschaften. Beiträge zur Kenntniss des russischen Reiches und der angränzenden Länder Asiens. Hrsg. von K. E. v. Baer und Gr. v. Helmersen. B. 2, 3, 5, 8, 9, 11, 12, 15, 17–23. 8°. *St. Petersburg,* 1839–61.

——— Kaiserliche freie ökonomische Gesellschaft zu St. Petersburg. Mittheilungen. B. 1–9. Jahrg. 1855–63. 8°. *St. Petersburg,* 1855–63.

——— Russisch-kaiserliche Gesellschaft für die gesammte Mineralogie. Schriften. B. 1. Abth. 1, 2. 8°. *St. Petersburg,* 1842.

——— Russisch-kaiserliche mineralogische Gesellschaft zu St. Petersburg. Verhandlungen. Jhrg. 1842–46, 1855–56, 1857–58. 8°. *St. Petersburg,* 1842–58.

Saint-Pierre, Jacques Henri Bernardin de. Études de la nature. Abrégé des œuvres de. 12°. *Londres,* 1799.

ST. PÖLTEN. Programm der Nö. Landes-Ober-Realschule in St. Pölten. Schuljahre 1866–67. 8°. *St. Pölten,* 1866–67.

Sainte Preuve. Dictionnaire de l'industrie par. *See* **Baudrimont, A. E., and others.**

SAINT QUENTIN. Société académique des sciences, arts, belles-lettres et agriculture. Travaux. 3e série. T. 3–7, 9–13, 1862–76. 8°. *Saint Quentin,* 1862–76——.

Saint-Robert, Paul de. Du mouvement des projectiles lancés par les armes à feu rayées. 8°. *Paris,* 1861.

Digitized by Google

Saladee, C. W., and co. The coach maker's guide. 2 v. *New York*, 1853-54.

——— Coach maker's magazine; ed. by. *See* **Coach** maker's.

SAL-AMMONIAC. Fabrikation des Salmiaks. *See* **Rözling,** C. W. **86 Neuer Schauplatz der Künste.**

SALFORD (England). Salford borough royal museum and library. 2d report of the executive committee. 8°. *Salford*, 1850. pp. 7.

Salisbury, J. H. History and chemical investigation of maize, or Indian corn. 8°. *Albany*, 1849.

Salmon, —. Art du potier d'étain, par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 13.**

Salmon, William. Medicina practica, or practical physic; shewing the method of curing the most usual diseases happening to human bodies. The whole compleated in 3 books. 12°. *London*, 1692.

——— Polygraphice, or the arts of drawing, engraving, etching, limning, painting, vernishing, japaning, gilding, etc. 8th ed. 2 v. *London*, 1701.

SALMON fisheries, by Archibald Young. *See* **Holdsworth,** E. W. H, and **Young,** Archibald.

——— Natural history and habits of the. *See* **Fry,** W. H.

Salomons, A. Handbook of the diseases of the eye, their pathology and treatment. 8°. *Boston*, 1870.

SALT LAKE city directory. *See* **Owens,** G.

SALT. Production et emploi du sel en Angleterre. *See* **Edwards,** H. M.

——— springs. Salzmünde. *See* **Mirus,** A.

——— works. Grundrisz der Salinenkunde. *See* **Kerl,** Bruno.

——— ——— Zeitschrift für das Berg-Hütten- und Salinenwesen. *See* PRUSSIA. **Ministerium** für Handel.

SALTS. Abridgments English Patents, No. 40.

——— Chemical technology; acids, alkalies and. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

SALTWOOD tunnel, Practical tunnelling; exemplified by. *See* **Simms,** F. W.

Salverte, Eusèbe. Des sciences occultes, ou essai sur la magie, les prodiges et les miracles. 2e éd. 8°. *Paris*, 1843.

Salvétat, Alphonse. Leçons de céramique comprenant les notions de chimie, de technologie et de pyrotechnie. *Illus.* T. 1-2. 8°. *Paris*, 1857.

Salvétat, Alphonse—Continued.

——— Porcelaine chinoise avec notes par *See* **Julien,** Stanislas.

Salviati, C. v. Berichte über den landwirthschaftlichen Theil der Pariser Welt-Ausstellung von 1867. Theil 1. 4°. *Berlin*, 1868.

Salwer, S. G. Deutschlands Obst- und Beerenfrüchte. 4°. *Stuttgart*, 1854.

Samson, G. W. Elements of art criticism, or the principles of man's nature as addressed by art. 12°. *Philadelphia*, 1867. Also abridged ed., 1868.

Samuda, Jacob. Clegg and Samuda's atmospheric railway. *See* **Clegg,** S.

Samuelson, James, and **Hicks,** J. Braxton. The honey-bee; its natural history, habits, anatomy and microscopic beauties. Also two chapters on instinct and reason; being an introduction to the study of comparative psychology. 12°. *London*, 1860.

——— ——— Humble creatures; the earthworm and the common horsefly. Eight letters. *Illus.* 12°. *London*, 1858.

SAN FRANCISCO. Mechanic's institute. Report of the 8th industrial exhibition, of 1871. 8°. *San Francisco, n. d.*

——— Mercantile library association. Reports, with list of officers, for 1858-59. 5th, 13th, 16th, 18th, 19th. [The 16th and 19th are entitled, Reports of the president, treasurer and librarian.] 8°. *San Francisco*, 1858-59.

Sandberger, Fridolin. Jahrbücher des Vereins für Naturkunde; hrsg. v. *See* NASSAU.

Sander, Heinrich. Das Grosse und Schöne in der Natur. 2 Bde. [in 1]. 2te Aufl. *Leipzig*, 1781.

Sanders, Daniel. Wörterbuch der deutschen Sprache. 3 Bde. 4°. *Leipzig*, 1860-65.

Sands, B. F. Astronomical and meteorological observations made at the United States naval observatory during the year 1869. 4°. *Washington*, 1872.

——— Reports on observations of the total eclipse of the sun, Aug. 7th, 1869. 4°. *Washington*, 1869.

Sands, Samuel. American farmer; publ. by. *See* **American.**

Digitized by Google

Sandys, William, and **Forster,** Simon Andrew. History of the violin and other instruments played on with the bow, from remotest times to the present. An account of the principal makers, English and foreign. *Illus.* 8°. *London,* 1864.

Sanitarian (The), and organ of the Medico-legal society; a monthly magazine, devoted to the preservation of health, mental and physical culture. A. N. Bell, editor; J. Y. Cuyler, associate editor. v. 1–5, 1874–77. [v. 1–3 are entitled, The Sanitarian; a monthly journal. A. N. Bell, ed.] 8°. *New York,* 1874–77——.

SANITARY affairs. Report on the sanitary condition of the laboring population of Great Britain. *See* **Chadwick,** Edwin.

—— commission, History of the United States'. *See* **Stillé,** Charles J.

—— condition of dwelling houses in town and country. *See* **Waring,** George E., *jr.* **Van Nostrand science series, No. 31.**

—— drainage of houses and towns. *See* **Waring,** George E., *jr.*

—— engineering. *See* **Latham,** Baldwin.

—— improvement, Journal of. *See* **Journal** of gas-lighting, etc.

—— measures in war. Militair-Sanität und freiwillige Hilfe im Kriege. Von Mosetig v. Moorhof. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

—— work in small towns and villages. *See* **Slagg,** Charles.

SANSKRIT-English dictionary. *See* **Benfey,** Theodore.

Santerem, *Vicomte* de. Démonstration des droits qu'a la couronne de Portugal sur les territoires situés sur la côte occidentale d'Afrique entre le 5e degré et 12 minutes et le 8e de latitude méridionale, et par conséquent sur les territoires de Molembo, de Cabinde et d'Ambriz. 8°. *Lisbonne,* 1855. pp. 40.

SANTIAGO (Chili). Universidad de Chile. Anales de 1843-44, 1848-52, 1855-57. 8°. *Santiago de Chile,* 1843-57.

SAP. Saftgewinnungsverfahren der Diffusion in der Zuckerfabrikation. *See* **Jičinský,** Ferdinand.

SARATOGA SPRINGS, Miller's guide to. *See* **Richards,** T. Addison.

Sargent, F. W. On bandaging, and other operations of minor surgery, with additional chapter on military surgery. *Illus.* 12°. *Philadelphia,* 1856. New ed., 1862.

Sargent, John O. Steam navigation in the United States, by. **Weale's papers on engineering, v. 3.**

Sargent and co. Price list and illustrated catalogue of hardware. 8°. *New York,* 1874.

Sars, Michael. Om de i Norge forekommende fossile Dyrelevninger fra Quartaerperioden, et Bidrag til vor Faunas historie. Universitetsprogram for første Halvaar, 1864. *Illus.* 4°. *Christiania,* 1865.

Sartain, J. The American gallery of art, from the works of the best artists, with poetical and prose illustrations by distinguished American authors. 4°. *Philadelphia,* 1848.

Sassoon mechanics' institute. Rules and catalogue of the library. 8°. *Bombay.* 1874.

Saunders, George. A treatise on theatres. 4°. *London,* 1790.

Saunders, Richard. Palmistry; the secrets thereof disclosed, or a familiar, easy and new method whereby to judge of the most general accidents of man's life from the lines of the hands, with all its dimensions and significations. 24°. *London,* 1663.

Saunders, William. Native and exotic grape. *See* **Both** sides of the grape question.

SAUSAGE making. Das Wurstlergeschäft. *See* **Weintz,** M. **149 Neuer Schauplatz der Künste.**

Sauzay, A. Wonders of glass-making in all ages. *Illus.* 12°. *New York,* 1870. **Illustrated library of wonders, v. 1.**

Savage, Will am. A dictionary of the art of printing. 8°. *London,* 1841.

—— On the preparation of printing ink, black and coloured. 8°. *London,* 1832.

SAVAGES, Modern. **Science lectures for the people, series 6.**

Savalle, Désiré. Progrès récents de la distillation. 4°. *Paris,* 1873.

Savier, J. B. Treatise on the diseases of the mouth, etc. *See* **Gariot,** —. **American library of dental science, v. 4.**

SAVINGS banks. Allgemeine Bildungsmittel. Sparcassawesen. Von Carl H.

Digitized by Google

SAVINGS banks—Continued.

Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— ——— and institutions. Istituti di providenza, le casse di risparmio. *See* ITALY.

SAW-filing, Art of. *See* **Holly**, H. W.

SAWS, Mechanical. *See* **Worssam**, S. W.

Sax, Carl. Türkei. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Sax, J. Bradford. The organic laws; or laws that govern the human organism. 8°. *New York*, 1851.

SAXONY. Die Entwicklung der sächsischen Landwirthschaft in den Jahren 1845–54. Bericht an das königlich-sächsische Ministerium des Innern, von Reuning. 8°. *Dresden*, 1856.

——— Generalübersicht sämmtlicher Ortschaften des Königreichs Sachsen, nach der neuen Organisation der Behörden, mit Angabe ihrer Einwohner- und Häuserzahl am 1. Dec. 1871. 4°. *Dresden*, 1874.

——— Gesetzliche Verordnungen, die Anlegung von Dampfkesseln betreffend. 8°. *Dresden*, 1855.

——— Landwirthschaftlicher Central-Verein der Provinz Sachsen. Zeitschrift. Hrsg. von Stadelmann und A. Delius. Jahrg. 19–30, 1862–73. 8°. *Halle*, 1862–73——.

——— Statisches Bureau. Kalender und statistisches Jahrbuch, 1874. 8°. *Dresden*, 1874.

——— Die Unterstützungscasse für landwirthschaftliche Arbeiter, nach den Beschlüssen des Landesculturrathes, 1867. 8°. *Dresden*, 1868.

——— Verordnung, die Ertheilung von Erfindungsprivilegien Patenten betreffend. 16°. *Dresden*, 1853.

——— Zeitschrift für die gesammten Naturwissenschaften. *See* HALLE.

Saxton's rural handbooks. 3 v. 18°. *New York*, 1862.

v. 1. The cow, dairy husbandry and cattle breeding. By M. M. Milburn.

v. 2. The hog; its origin and varieties. By H. D. Richardson.

v. 3. Domestic fowl and ornamental poultry. By H. D. Richardson.

Say, Thomas. Writings on the entomology of North America. Ed. by John L. LeConte; with a memoir of the author by

Say, Thomas—Continued.

George Ord. v. 1, 2, with plates. 8°. *New York*, 1859.

Sayers, E. A manual on the culture of the grape, and dissertation on the growth and management of fruit trees, adapted to the northern states. 12°. *Newark, N. J.*, 1837.

SCALES and test-machines. Wagen, Dynamometer und Materialprüfungsmaschinen. Johann Spačil. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 19.**

——— Die Waagen und ihre Construction. *See* **Hartmann**, C. F. A. **231 Neuer Schauplatz der Künste.**

SCARLET fever. *See* **Morris**, Caspar.

Scenery, science, and art; extracts from the note-book of a geologist and mining engineer. *See* **Ansted**, D. T.

Schaab, K. A. Die Geschichte der Erfindung der Buchdruckerkunst. 3 Bde. 3te Ausg. 8°. *Mainz*, 1855.

Schacht, Hermann. Der Baum. Studien über Bau und Leben der höheren Gewächse. *Illus.* 8°. *Berlin*, 1853.

——— The microscope, and its application to vegetable anatomy and physiology. Ed. by Frederick Currey. 2d ed. 12°. *London*, 1855.

——— Das Mikroskop und seine Anwendung, insbesondere für Pflanzen-Anatomie und Physiologie. *Illus.* 8°. *Berlin*, 1851.

——— Die Prüfung der im Handel vorkommenden Gewebe durch das Mikroskop und durch chemische Reagentien. *Illus.* 8°. *Berlin*, 1853.

Schaefer, J. C. New manual of homœopathic veterinary medicine; an easy arrangement of diseases, showing how to treat horses, cattle, sheep, swine and dogs. Transl. from the German, by Charles J. Hempel. 8°. *New York*, 1863.

Schaeffer, George Christian. American railroad journal; ed. by. *See* **American.**

Schaer, John F. Confectioner's guide; a fine collection of ornaments for cakes 4°. *Baltimore*, 1856.

Schaffer, Wenzel. Theoretisch-praktische Abhandlungen aus dem Gebiete der Wasser- und Strassen-Baukunde. roy. 8°. *Wien*, 1867.

Schaller, P. Der wohlunterrichtete Ziegler. Verfertigung aller Arten von Mauer- und Dachziegeln. Verbessert

Digitized by Google

Schaller, P.—Continued.
durch Carl Matthaey. 2te Aufl. 8°. *Weimar*, 1841. **34 Neuer Schauplatz der Künste.**

Schanz, Julius. Der Montcenis-Tunnel, seine Erbauung und Umgebungen. 16°. *Wien, Pest, Leipzig*, 1872.

Scharf, George, *jr.* The Greek court erected in the Crystal palace, by Owen Jones; described by. 8°. *London*, 1854. **Crystal palace library, v. 1.**

——— The Pompeian court in the Crystal palace; described by. 8°. *London*, 1854. **Crystal palace library, v. 3.**

——— The Roman court, including the antique sculptures in the nave, erected in the Crystal palace, by Owen Jones; described by. 8°. *London*, 1854. **Crystal palace library, v. 1.**

Scharfenberg, August. Die Wunder der chemischen Felddüngung. 8°. *Ulm*, 1847.

Schasler, Max. Die Perliner Kunst-Ausstellung von 1852. Nebst einer Enleitung: über die 'Stellung der Kunst zur Kritik' und die 'Begrenzung der Kunstgebiete'. 16°. *Berlin*, 1852.

——— Die Schule der Holzschneidekunst, mit Geschichte, Technik und Aesthetik derselben. *Illus.* 12°. *Leipzig*, 1866.

Schauplatz (Neuer) der Künste und Handwerke. *See* **Neuer Schauplatz der Künste.**

Schedel, C. F. B. Practische und bewährte Anweisung zur Destillirkunst und Liqueurfabrication. Neu bearbeitet und vermehrt von G. Perini. *Illus.* 3te Aufl. 8°. *Weimar*, 1841.

Schédel, Klemens. Étude des armes; augm. par. *See* **Xylander,** J.

Scheerer, Th. Lehrbuch der Metallurgie; mit besonderer Hinsicht auf chemische und physikalische Principien. B. 1. 8°. *Braunschweig*, 1848.

Scheffer, Joannes. Graphice. Id est de arte pingendi liber singularis cum indice necessario. 24°. *Norimbergæ*, 1669.

Scheffler, Hermann. Organ für die Fortschritte des Eisenbahnwesens; hrsg. v. *See* **Organ.**

——— Ursachen der Dampfkessel-Explosionen und das Dampfkessel-Thermometer als Sicherheitsapparat. 8°. *Berlin*, 1867.

Scheibler, C., and **Stammer,** K. Jahres-Bericht über die Untersuchungen und Fortschritte auf dem Gesammtgebiete der Zuckerfabrikation. Jahrg. 1–15. [Register, 1–12.] *Breslau*, 1863–76——.

Schele De Vere, Maximilian. Studies in English; or, glimpses of the inner life of our language. 12°. *New York*, 1867.

Schell, Wilhelm. Allgemeine Theorie der Curven doppelter Krümmung in rein geometrischer Darstellung. 8°. *Leipzig*, 1859.

Schelle, Eduard. Musikalische Instrumente. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 15.**

Schellen, H. Die Spectralanalyse; in ihrer Anwendung auf die Stoffe der Erde und die Natur der Himmelskörper. 8°. *Braunschweig*, 1870.

Schenck, Peter Adam. The gardener's text-book; formation and management of the kitchen garden, and culture of its vegetables, fruits and medicinal herbs. 24°. *Boston*, 1851.

Scheppler, Karl. Das Nivelliren und der Waldwegbau. *Illus.* 8°. *Aschaffenburg*, 1863.

Scherf, Carl Friedrich. Der Kleinigkeitsfärber, oder Anweisung, wollene, seidene, baumwollene und leinene Zeuge zu färben, auch Farben von Stoffen abzuziehen und darauf neue zu erzeugen, sowie auch die Zeuge zu appretiren. 2te Aufl. 8°. *Weimar*, 1848. **132 Neuer Schauplatz der Künste.**

——— Theoretisch-practische Belehrung über die Anstellung und Führung der Waidindigkülpe; die Krankheiten desselben, nebst genauer Angabe ihrer Kennzeichen und Heilmittel, und Sammlung von Stahlproben. *Illus.* 1ste Aufl. 8°. *Weimar*, 1848. **120 Neuer Schauplatz der Künste.**

Scheuchenstuel, Carl von. Idioticon der österreichischen Berg- und Hüttensprache. Zum besseren Verständnisse des österr. Berg-Gesetzes und dessen Motive für Nicht-Montanisten. 8°. *Wien*, 1856.

Scheutz, Georg and Eduard. Calculations by machinery. Specimens of tables. *See* **Specimens.**

Digitized by Google

Schidermair, Eduard. Muster-Sammlung für Bautischler; fortgesetzt von. *See* **Krug,** E.

Schiebe, August. Manuel théorique et pratique de la correspondance commerciale. 8°. *Leipzig,* 1830.

Schiff, Hugo. Einführung in das Studium der Chemie, nach Vorlesungen gehalten am naturwissenschaftlichen Institut in Florenz. Bibliothek für Wissenschaft und Literatur, B. 10. Naturwissenschaftliche Abtheilung, B. 1. 8°. *Berlin,* 1876.

——— Untersuchungen über metallhaltige Anilinderivate, und über die Bildung des Anilinroths. 8°. *Berlin,* 1861.

Schiller, Ludwig Franz Albert. Allgemeines Bücher-Lexikon. B. 10-12. Hrsg. von. *See* **Heinsius,** J. W.

Schilling, N. H. Anhang zum Handbuche der Steinkohlengas-Beleuchtung. *See* **Reissig,** W.

——— Handbuch für Steinkohlengas-Beleuchtung, mit einer Geschichte der Gasbeleuchtung; von Fr. Knapp. *Illus.* 4°. *München,* 1860.

Schimmer, Gustav Adolf. Statistik der öffentlichen und Privat-Volksschulen in den im Reichsrathe vertretenen Königreichen und Ländern. 1870-71. Hrsg. von der K. K. statistischen Central-Commission. 4°. *Wien,* 1873. [†]

——— Statistik des Judenthums in den im Reichsrathe vertretenen Königreichen und Ländern. Hrsg. von der K. K. statistischen Central-Commission. 4°. *Wien,* 1873. [†]

Schinz, C. Dokumente betreffend den Hohofen zur Darstellung von Roheisen. roy. 8°. *Berlin,* 1863.

Schlegel, Carl Friedrich. Vollständige Mühlenbaukunst nach den neuesten wichtigsten Erfindungen und Verbesserungen, mit besonderer Berücksichtigung der amerikanischen und schweizerischen Kunstmühlen. Nebst Anleitung gewöhnliche Mahlmühlen nach dem amerikanischen System einzurichten. 4te Aufl. Nebst Atlas mit 52 Tafeln. 8°. and l. 4°. *Leipzig und Heidelberg,* 1860.

Schleiden, M. J. Herr Justus Liebig in Giessen und die Pflanzen-Physiologie. 8°. *Leipzig,* 1842.

——— Poetry of the vegetable world. Popular exposition of botany and its relations to man. 12°. *Cincinnati,* 1853.

Schleiden, M. J., and **Schmid,** E. E. Encyclopädie der gesammten theoretischen Naturwissenschaften in ihrer Anwendung auf die Landwirthschaft. 3 Bde. B. 1. Physik, anorganische Chemie und Mineralogie. B. 2. Organische Chemie, Meteorologie, Geognosie, Bodenkunde und Düngerlehre. B. 3. Physiologie der Pflanzen und Thiere, und Theorie der Pflanzen-Cultur. 8°. *Braunschweig,* 1850.

Schlesinger, Isidor. Der Eiskellerbau in Massiv- und Holz-Construction, sowohl in wie über der Erde. Eine Sammlung ausgeführter Eisbehälter mit Vor- und Bierlager-Räumen, nach den neuesten Constructionen, nebst deren genauen Erläuterungen und einer Anleitung zum Bau von Eiskellern und Eisbehältern mit Lagerräumen. *Illus.* 4°. *Berlin,* 1861. pp. 16.

Schlichtegroll, Friedrich von. Course of lithography; preface by. *See* **Senefelder,** A.

Schlichting, J. Zur Schiffbarmachung der Flüsse. Kritische Beleuchtung der Regulirung oder Canalisirung der deutschen Flüsse. 8°. *Berlin,* 1876. pp. 31.

Schliemann, Henry. Troy and its remains; a narrative of researches and discoveries, made on the site of Ilium, and in the Trojan plain. Transl. with the author's sanction. Ed. by Philip Smith. 8°. *London,* 1875.

Schlimmbach, C. P. Examen critique des différences essentielles qui existent entre les armes à feu françaises et anglaises, et qui doivent être considérées comme la cause principale de l'infériorité des Français dans leurs derniers combats contre les Anglais. 12°. *Bruxelles,* 1839.

Schlipf, *Oberlehrer.* Rathschläge zur Bereitung des Obstmostes. 8°. *Stuttgart,* 1860.

Schmid, Adalbert von. Mittheilungen über die Vorbereitung der materiellen Mittel zum Betriebe der Eisenbahn über den Semmering. *Illus.* 8°. *Wien,* 1852.

Schmid, Andreas. Die Bienenzeitung; hrsg. von. *See* **Bienenzeitung.**

Schmidt, Carl Heinrich. Technologisches Skizzenbuch. Eine systematisch geordnete Zusammenstellung skizzirter Zeichnungen der Ofen, Maschinen und Werkzeuge, etc. fol. *Stuttgart,* 1855.

Digitized by Google

Schmidt, Christian Heinrich. Anlegung der Blitzableiter; übers. v. *See* **Gay-Lussac, J. L., and Pouillet, C. S. M. 229 Neuer Schauplatz der Künste.**

—— Anlegung von Eisenbahnen; hrsg. v. *See* **Biot, Eduard. 76 Neuer Schauplatz der Künste.**

—— Benutzung des Papier-maché zur Verfertigung von Larven, sowie das Coloriren, Lackiren und Decoriren dieser Gegenstände, mit Kupferstichen und Lithographien. *Illus.* 8°. *Weimar*, 1847. **151 Neuer Schauplatz der Künste.**

—— Branntweinbrennereibetrieb. *Illus.* 8°. *Weimar*, 1854. **215 Neuer Schauplatz der Künste.**

—— Brunnen-Ingenieur: in's Deutsche, von. *See* **Dumas, J. 233 Neuer Schauplatz der Künste.**

—— Chocoladefabricant. 3te Aufl. 8°. *Weimar*, 1848. **20 Neuer Schauplatz der Künste.**

—— Coloriren und Decoriren des Porcellans; übers. v. *See* **Brongniart, A. 146 Neuer Schauplatz der Künste.**

—— Compendiöses Handbuch der Färberei wollener, seidener, baumwollener, leinener und hanfener Gewebe, sowie auch der Garne aus diesen Stoffen. 8°. *Weimar*, 1860. **248 Neuer Schauplatz der Künste.**

—— Construction und Einrichtung der Dampfschiffe; übertragen von. *See* **Janvier, —. 98 Neuer Schauplatz der Künste.**

—— Deutsches Bäckerhandwerk im Jahre 1847. *Illus.* 8°. *Weimar*, 1847. **153 Neuer Schauplatz der Künste.**

—— Dreh- und Repetirpistolen; übers. von. *See* **Anquetil. 222 Neuer Schauplatz der Künste.**

—— Drehkunst; rev. v. *See* **Drehkunst. 15 Neuer Schauplatz der Künste.**

—— Elemente der Maschinen-Flachs-Spinnerei; übers. v. *See* **Choimet, N. 128 Neuer Schauplatz der Künste.**

—— Englische Färberei; übers. v. *See* **Smith, D. 193 Neuer Schauplatz der Künste.**

—— Englische Gewehrfabrication; übers. v. *See* **Greener, W. 83 Neuer Schauplatz der Künste.**

—— Englische Pendeluhren; übers. v. *See* **Encyclopædia Britannica. 9 Neuer Schauplatz der Künste.**

Schmidt, Christian Heinrich. Erfindungen und Fortschritte in der Farbenfabrikation, sowohl in Bezug auf Erd- und Oxydfarben, als auch Lackfarben und Farbstoffe aus Harnsäure, wie aus Steinkohlentheer zum Färben und Drucken der Gewebe. 8°. *Weimar*, 1864. **264 Neuer Schauplatz der Künste.**

—— Der Fabricant von Kautschuk- und Guttapercha-Waaren sowie der Gegenstände aus künstlichem Gummi. Verfertigung wasserdichter Zeuge von Wachstuch und lackirtem Leder. *Illus.* 8°. *Weimar*, 1856. **227 Neuer Schauplatz der Künste.**

—— Die Fabrication der für die Glasmalerei, Emailmalerei und Porcellanmalerei geeigneten Farben, nebst Anweisung, die dazu erforderlichen Materialien und chemischen Producte vorzubereiten und darzustellen, sowie die mit den genannten Farben ausgeführten Malereien einzubrennen. *Illus.* 1ste Aufl. 8°. *Weimar*, 1848. **118 Neuer Schauplatz der Künste.**

—— Farbwaarenkunde und Farbenchemie für Färberei und Zeugdruck. 8°. *Weimar*, 1852. **198 Neuer Schauplatz der Künste.**

—— Flachs-, Hanf- und Wergspinner; übers. v. *See* **Ancellin, C. 236 Neuer Schauplatz der Künste.**

—— Formschneidekunst. Druckformen und Modeln für Wachstuch, Tapeten und Spielkarten; Verzierungen und Vignetten durch Abgiessen und Galvanoplastic; Guillochiren, Graviren, Punziren und Molettiren der Druckwalzen. *Illus.* 8°. *Weimar*, 1849. **173 Neuer Schauplatz der Künste.**

—— Galvanoplastik; bearb. v. *See* **Walker, C. 123 Neuer Schauplatz der Künste.**

—— Das Ganze der Stärkefabrication; umgearb. v. *See* **Bergmann, F. C. A. 93 Neuer Schauplatz der Künste.**

—— Grundsätze der Bierbrauerei, nach den neuesten technisch-chemischen Entdeckungen, mit Berücksichtigung der Baierischen Brauerei. *Illus.* 8°. *Weimar*, 1838. **96 Neuer Schauplatz der Künste.**

—— Grundsätze der Dampfmaschinen; übersezt von. *See* **Verdam, G. J. 69, 71, 100 Neuer Schauplatz der Künste.**

Digitized by Google

Schmidt, Christian Heinrich. Grundsätze der Werkzeugswissenschaft; übersetzt v. *See* **Verdam,** G. J. **66-68 Neuer Schauplatz der Künste.**

——— Handbuch der Baumwollenweberei. *Illus.* 8°. *Weimar,* 1844. **135 Neuer Schauplatz der Künste.**

——— Handbuch der gesammten Lohgerberei. *Illus.* 8°. *Weimar,* 1847. **110 Neuer Schauplatz der Künste.**

——— Handbuch der Photographie auf Metallplatten, Papier und Glas. Nach dem Französischen des Valicourt, Blanquart-Evrard, Barreswil und Davanne. *Illus.* 8°. *Weimar,* 1852-54. **197, 218 Neuer Schauplatz der Künste.**

——— Handbuch der Weissgerberei, Fabrication des ungarischen, französischen, Brüsseler und Erlanger, auch Riemers und Zeuglegers; sowie des feinen Handschuhleder; ferner Sämisch- und Pergamentgerberei, mit Leimsiederei. *Illus.* 8°. *Weimar,* 1854. **217 Neuer Schauplatz der Künste.**

——— Handbuch des Woll-Manufacturwesens. *See* **Hartmann,** C. F. A. **122 Neuer Schauplatz der Künste.**

——— Handbuch des Zeugdrucks, bearb. v. *See* **Persoz,** J. F. **162, 163 Neuer Schauplatz der Künste.**

——— Handbuch der Zuckerfabrikation, namentlich des Runkelrüben-, Rohr- und Stärkemehlzuckers. *Illus.* 2te Aufl. 8°. *Weimar,* 1847. **72 Neuer Schauplatz der Künste.**

——— Handbuch für Klempner; vermehrt v. *See* **Lebrun. 53 Neuer Schauplatz der Künste.**

——— Die Indigfabrication; übertragen v. *See* **Perrottet,** G. S. **17 Neuer Schauplatz der Künste.**

——— Die Kellereiwirthschaft. Behandlung des Weines, Bieres, Ciders, Rums und Araks in Gebinden und Flaschen im Keller. *Illus.* 8°. *Weimar,* 1852. **194 Neuer Schauplatz der Künste.**

——— Die Kerzen- und Seifenfabrication. *Illus.* 8°. *Weimar,* 1852. **195 Neuer Schauplatz der Künste.**

——— Die Kunst des Böttchers; verbess. v. *See* **Barfuss,** F. W. **102 Neuer Schauplatz der Künste.**

——— Kunst des Messerschmiedes; hrsg. von. *See* **Landrin,** M. H. **85 Neuer Schauplatz der Künste.**

Schmidt, Christian Heinrich. Die Kunst Töpferwaare anzufertigen; übers. v. *See* **Bastenaire-Daudenart. 88 Neuer Schauplatz der Künste.**

——— Die Kunst des Vergoldens, Versilberns, Verplatinirens, Verzinnens, Verzinkens, Verbleiens, Verkupferns, Verkobaltens und Vernickelns der Metalle, das Argentiren des Eisens, und die Metalle mit Aluminium zu überziehen. 2te Aufl. *Illus.* sm. 8°. *Weimar,* 1862. **133 Neuer Schauplatz der Künste.** Also ed. of 1843.

——— Kürschnerkunst, mit naturgeschichtlichen Notizen der Felle und Pelzthiere, und Schilderung des Pelzhandels. *Illus.* 8°. *Weimar,* 1847. **130 Neuer Schauplatz der Künste.**

——— Lederfärbekunst und englische Fixfärberei der Handschuhleder. *Illus.* 8°. *Weimar,* 1848. **111 Neuer Schauplatz der Künste.**

——— Lehrbuch der Färberei; rev. v. *See* **Vitalis,** J. B. **6 Neuer Schauplatz der Künste.**

——— Lehrbuch der Spinnereimechanik. Text, 8°; plates, fol. *Leipzig,* 1857.

——— Lohgerberei; übers. v. *See* **Knoderer,** C. **234 Neuer Schauplatz der Künste.**

——— Neues Journal der Gerberei; hrsg. v. *See* **Voigt,** B. F.

——— Neueste Fortschritte in der Safgewinnung aus Runkelrüben. *Illus.* 8°. *Weimar,* 1856. **232 Neuer Schauplatz der Künste.**

——— Papier-Tapeten-Fabrication. *Illus.* 8°. *Weimar,* 1848. **10 Neuer Schauplatz der Künste.**

——— Photographie; übers. v. *See* **Laurent,** A.

——— Rezeptbuch für Ebenisten, etc.; bearb. v. *See* **Siddons,** G. A. **82 Neuer Schauplatz der Künste.**

——— Runkelrüben-Branntweinbrennerei; bearbeitet v. *See* **Payen,** A. **221 Neuer Schauplatz der Künste.**

——— Saffianfabrication, mit Beschreibung der Geräthe, Werkzeuge und Maschinen. *Illus.* 8°. *Weimar,* 1854. **213 Neuer Schauplatz der Künste.**

——— Schlossermeister: Beiträge von. *See* **Grandpré,** L. M. J. O. de. **50 Neuer Schauplatz der Künste.**

Digitized by Google

Schmidt, Christian Heinrich. Staffirmalerei; bearb. v. *See* **Thon,** C. F. G. **87 Neuer Schauplatz der Künste.**

——— Das Stereoskop; übersetzt v. *See* **Brewster,** D. **35 Neuer Schauplatz der Künste.**

——— Der Taback als wichtige Culturpflanze: mit Benutzung der 'Monographie du tabac' des Fermond. *Illus.* 8°. *Weimar,* 1858. **238 Neuer Schauplatz der Künste.**

——— Verschiedene Substanzen, welche gegenwärtig zur Beleuchtung angewendet werden. *Illus.* 8°. *Weimar,* 1856. **230 Neuer Schauplatz der Künste.**

——— Vollständiges Farben-Laboratorium. 2te Aufl. *Illus.* 8°. *Weimar,* 1847. **117 Neuer Schauplatz der Künste.**

——— Der vollständige Feuerzeugpraktikant. Beschreibung aller Feuer-Erzeugungs-Apparate und Zündwaaren; Fabrikation der Zündstoffe nebst Anleitung. 2te Aufl. *Illus.* 8°. *Weimar,* 1847. **104 Neuer Schauplatz der Künste.**

——— Die Wachs-Industrie und -Kunst: technische und artistische Behandlung des Wachses. *Illus.* 8°. *Weimar,* 1853. **199 Neuer Schauplatz der Künste.**

——— Zeitschrift für Chaisenfabrikanten, etc.; hrsg. v. *See* **Voigt,** B. F.

——— Zeitschrift für Klempner, etc.; hrsg. v. *See* **Voigt,** B. F.

——— Zeitung für Porcellan-, Steingut- und Glasfabrikanten und Verfertiger der Meerschaumköpfe. 5 Bde. 4°. *Weimar,* 1845.

Schmidt, Eduard, and **Nobach,** Gustav. Gegohrene Flüssigkeiten. Bier, Malz, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

Schmidt, Gustav. Theorie der Dampfmaschinen. *Illus.* 8°. *Freiberg,* 1861.

Schmidt, György. Természettudományi társulat közlönye; szerkesztő. *See* PESTH.

Schmidt, J. Beiträge zur Kenntniss der Büchsenmacherkunst. *Illus.* 16°. *Weimar,* 1843. **131 Neuer Schauplatz der Künste.**

Schmidt, J. A. The diseases of the wine; how to prevent and how to cure them, according to the doctrines of M. Pasteur. 8°. *New York,* 1868.

Schmidt, Peter von. The young assayer's and miner's assistant. 24°. *New York,* 1849.

Schmidt, Robert. Die Fortschritte in der Construction der Dampf-Maschine von 1854 bis 1862. B. 2–3. *Illus.* 8°. *Leipzig,* 1862.

——— Maschinen zur Bearbeitung des Holzes *Illus.* 8°. *Leipzig,* 1861. Also, 1870.

Schmidt, Valdemar. Le Danemark à l'exposition universelle de 1867, étudié au point de vue de l'archéologie. 8°. *Paris,* 1868.

Schmidt, Walther. Die neuesten Fortschritte im Maschinenwesen bei der Branntweinfabrikation. 8°. *Ratibor,* 1868.

Schmidt, Wilhelm. Das Beizen, Schleifen und Poliren des Holzes, Elfenbein's, Horn's, der Perlmutter und Knochen, sowie deren Konservirung als technisches Material und die Verschönerung der daraus gefertigten Kunst- und Industriearbeiten. Hrsg. von. 5te Aufl. von Thon's 'Holzbeizkunst', etc. *Illus.* *Weimar,* 1871. **107 Neuer Schauplatz der Künste.**

Schmied, Adam Anton, und **Wiesner,** Julius. Feldwirthschaft und Geräthe. Nahrungs- und gewerbliche Pflanzen. Düngemittel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

Schmied, C. Anleitung zur Verfertigung aller Arten Papparbeiten; verbess. v. *See* **Vollständige.**

——— Fabrikation der Fächer, Regen- und Sonnenschirme. *Illus.* 8°. *Weimar,* 1843. **126 Neuer Schauplatz der Künste.**

——— Die Korb- und Strohflechtkunst und die Siebmacherei. *Illus.* 8°. *Weimar,* 1843. **77 Neuer Schauplatz der Künste.**

——— Die Verfertigung der Gypsfiguren und des Gypsmarmors, sowie die Darstellung der Kupferfiguren durch die Galvanoplastik. *Illus.* 8°. *Weimar,* 1848. **165 Neuer Schauplatz der Künste.**

Schmitt, G. A. Knorr's methodical guide for teachers of music on the piano-forte. Transl. from the German ed. 12°. *Boston,* 1854.

Schmitts, Christoph. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH. **Polytechnischer** Verein.

Schmoelzl, J. Appendice aux canons rayés; trad. de l'allemand par E. Heydt. *Illus.* 8°. *Paris,* 1860. pp. 27.

Digitized by Google

Schmoelzl, J. Les canons rayés; historique de leur développement et perfectionnement. Étude militaire. Trad. de l'allemand par E. Heydt. *Illus.* 8°. *Paris,* 1860.

——— Résultat des expériences faites par l'artillerie russe sur les effets des canons rayés. *Illus.* 8°. *Paris,* 1861. pp. 28.

Schmorl, —, and **Seefeld,** —. Sammlung von Zeichnungen eiserner Brücken, Gezeichnet von den Studierenden des Brückenbaus der polytechnischen Schule zu Hannover, 1868–69. fol. *Hannover.* 1869. [†]

Schnabel, G. N. Statistik der landwirthschaftlichen Industrie Böhmens. 8°. *Prag,* 1846.

Schnauss, Julius. Das einfachste und sicherste Trocken-Verfahren der Gegenwart. 8°. *Leipzig,* 1863.

———Photographisches Lexicon. Ein alphabetisches Nachschlage-Buch. *Illus.* 8°. *Leipzig,* 1860.

Schnedermann, G. H. C. Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

Schnee, Gotthilf Heinrich. Encyklopädie der Landwirthschaft. Bearbeitet von Ahlburg, Dzierzon, Fischbach, Langethal, Lucas, P. Müller, Rueff, Stohmann und Vincent. 2te Aufl. von G. H. Schnee's Handbuch der Landwirthschaft. *Illus.* 2 Bde. sm. 4°. *Braunschweig,* 1860–62.

Schneider, J. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

Schneitler, C. F. Die Instrumente und Werkzeuge der höheren und niederen Messkunst, sowie der geometrischen Zeichnenkunst, ihre Theorie, Construction, Gebrauch und Prüfung. 2te Aufl. *Illus.* 8°. *Leipzig,* 1852.

——— Lehrbuch der gesammten Messkunst oder Darstellung der Theorie und Praxis des Feldmessens, Nivellirens und des Höhenmessens, der militairischen Aufnahmen, des Markscheidens und der Aufnahme ganzer Länder, sowie der geometrischen Zeichnenkunst. 2te Aufl. *Illus.* 8°. *Leipzig,* 1854.

——— Sammlung von Werkzeichnungen landwirthschaftlicher Maschinen und Geräthe. *Illus.* 1ste Serie [in 3 Heften], 1854; 2te Serie, 1–4 Heft, 1857. 4°. *Leipzig,* 1854–57.

——— and **Andree,** Julius. Die neueren und wichtigen landwirthschaftlichen Maschinen und Geräthe, ihre Theorie, Construction, Wirkungsweise und Anwendung. *Illus.* 8°. *Leipzig,* 1861.

——— ——— Sammlung von Werkzeichnungen landwirthschaftlicher Maschinen und Geräthe. 2te serie, Heft 1–4. Text, 4°; plates, fol. *Leipzig,* 1855–57.

Schnek, Isid., and **Lichnovsky,** Herman. Kautschukwaaren. Lederwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 6.**

Schoch, Gustav. Die mikroskopischen Thiere des Süsswasser-Aquariums; für Freunde des Mikroskopes und der Naturwissenschaften systematisch dargestellt. B. 1. Die Urthiere. 8°. *Leipzig,* 1868.

Schoedler, Friedrich. The book of nature: introduction to the sciences of physics, astronomy, chemistry, mineralogy, geology, botany, zoology, and physiology. Transl. from 6th German ed. by Henry Medlock. 8°. *Philadelphia,* 1853.

——— The treasury of science, natural and physical. Transl. and ed. by Henry Medlock. *Illus.* 8°. *London,* 1862.

Schoen, Johann Georg. Der Tunnel Bau. Vorlesungen am K. K. Polytechnischen Institute. 4°. *Wien,* 1866. 2te Aufl., 1874.

Schoenbein, Christian Friedrich. Beiträge zur nähern Kenntniss des Sauerstoffes. 4°. *München,* 1858. pp. 30.

———Mittheilungen über metallische Superoxyde. 4°. *München,* 1857. pp. 20.

——— Ueber das Verhalten des Bittermandelöles zum Sauerstoffe. 4°. *München,* 1857. pp. 16.

——— Ueber die nächste Ursache der spontanen Bläuung einiger Pilze. 4°. *München,* 1856. pp. 16.

——— Ueber einige neue Reihen chemischer Berührungswirkungen. 4°. *München,* 1856. pp. 32.

Schoffer, H. Die landwirthschaftliche Kreditkrisis unserer Tage. Eine populäre Darstellung der betreffenden Verhältnisse und Hülfsmittel. 8°. *Zürich,* 1867.

Scholfield, Nathan. Elements of plane geometry and mensuration. On the basis of Legendre's Elements. 8°. *New York,* 1845.

——— Elements of solid geometry and mensuration. With tables of squares, etc. 8°.

Digitized by Google

Scholfield, Nathan—Continued.
New York, 1845. pp. 20. [Bound with Elements of plane geometry].
——— Higher geometry and mensuration. 8°. *New York*, 1845. [Bound with Geometry and trigonometry.]
——— Higher geometry and trigonometry. 8°. *New York*, 1845.

Scholl, E. F. Der Führer des Maschinisten. 3te Aufl. 8°. *Braunschweig*, 1853. 5te Aufl., 1860.

Schön, J. Geschichte der Handfeuerwaffen. Eine Darstellung des Entwickelungsganges der Handfeuerwaffen von ihrem Entstehen bis auf die Neuzeit; bearbeitet von. *Illus.* 4°. *Dresden*, 1858.

Schonberg, W. Uhren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Schönemann, Th. Das Horizontal-Dynamometer und seine Anwendung auf die Mechanik. *Illus.* 8°. *Berlin*, 1864.

Schönfelder, von. Die baulichen Anlagen auf den Berg-Hütten- und Salinenwerken in Preussen. 3 Bde. [in 1. 1 B. plates.] 4°. fol. *Berlin*, 1861–64.

Schoof, Chr. Ludwig. Ergebnisse der meteorologischen Beobachtungen zu Clausthal vom 1. Dec. 1854 bis 1. Dec. 1859. Ein Beitrag zur Klimatologie des Harzes. 4°. *Clausthal*, 1860. pp. 38. **Kleine Schriften der nat.-forsch. Gesells. zu Emden, 7.**

SCHOOL amusements. *See* **Root,** N. W. Taylor.
——— L'école et la ferme. *See* **Greff,** Michel.
——— house architecture. *See* **Barnard,** H.
——— ——— ——— *See* **Robson,** Edward Robert.
——— ——— ——— Country schoolhouses and. *See* **Johonnot,** J.
——— houses. Reports on, by J. R. Freese. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**
——— ——— Schulbauten und Einrichtungen. Von Erasmus Schwab. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**
——— laws of Illinois. *See* ILLINOIS.

School of arts, science and manufactures; an elementary circle of the sciences, and general display of useful knowledge, designed as an introduction to natural philosophy, chemistry, etc. 2 v. 8°. *Nottingham*, 1817.

SCHOOL of mines. Columbia college, New York. *See* NEW YORK.
——— of mines. Cours professés à l'école des mines de Paris. *See* **Callon,** M. J.

School of wisdom; or repository of the most valuable curiosities of art and nature. 12°. *Gainsbrough*, 1776.
——— room, In the. *See* **Hart,** John L.

Schoolcraft, Henry R. Historical and statistical information respecting the history, condition and prospects of the Indian tribes of the United States; collected and prepared under the direction of the bureau of Indian affairs, per act of congress, Mar. 3d, 1847. v. 1–6. 4°. *Philadelphia*, 1851–57. [†]

Schooler, Samuel. Elements of descriptive geometry. Part 1. 4°. *Richmond, Va.*, 1853.

SCHOOLS. *See, also,* **Education.**
——— Mathematische Lehrmittel in Volks- und Mittelschulen, von Josef Knirr. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**
——— Oeffentliche und Privat Volksschulen. *See* **Schimmer,** Gustav Adolf.
——— Programm der Nö. Landes-Ober-Realschule in St. Pölten. *See* ST. PÖLTEN.
——— Report of the superintendent of public instruction in California. *See* CALIFORNIA.

Schooten, Henry. The hairy giants; a description of two islands in the South sea, called by the names of Benganga and Coma, discovered by H. Schooten of Harlem, in a voyage begun Jan. 1669, and finished Oct. 1671. Written in Dutch, and Englished by P. M. gent. 8°. *London*, 1671. pp. 29.

Schöpffer, Carl. Handwörterbuch der Fortschritte der gesammten Technologie. *Illus.* 8°. *Leipzig*, 1862.

Schott, Charles A. Astronomical observations in the Arctic seas, 1853–55, by E. K. Kane; discussed by. **Smiths'n contrib., v. 12.**
——— Magnetical observations in the Arctic seas, by E. K. Kane; reduced and discussed by. **Smiths'n contrib., v. 10.**
——— Meteorological observations in the Arctic seas, by E. K. Kane; discussed by. **Smiths'n contrib., v. 2.**

Schott, P. Gasparus. Mathesis Caesarea, sive Amussis Ferdinandea, in lucem publicam, & usum eruditae posteritatis, gra-

Digitized by Google

Schott, P. Gasparus—Continued.
tulantibus litteratorum geniis erecta, atque ad problemata universae matheseos, praesertim verò architecturae militaris explicata. sm. 4°. *Herbipolis*, 1662.

Schouw, J. F. Pflanzengeographischer Atlas, zur Erläuterung von Schouw's Grundzügen einer allgemeinen Pflanzengeographie. fol. *Berlin*, 1823.

Schrader, Hermann. Das Färben und Appretiren der sämmtlichen Pelzwaaren. 12°. *Leipzig*, 1863.

——— Der Färber, nach den Anforderungen der Gegenwart. Lehrbuch der Wollen-, Baumwollen-, Seiden- und Leinen Färberei. Theil 1. Färberei der losen Wolle, der Garne, Tuche, Merinos und aller Gattungen Wollenstoffe. Theil 2. Färberei und Appretur der Seide und Seidenstoffe. Theil 3. Färberei, Bleicherei und Appretur der Leinen- und Baumwollengewebe. Theil 4. Rationelle Farbwaarenkunde. T. 1, 2te Aufl. T. 2–4, 3te Aufl. sm. 8°. *Berlin*, 1871–74.

——— Neueste Resultate aus der Färberei. 12°. *Leipzig*, 1861.

——— Der Steinkohlentheer, die wichtigste Färbsubstanz der Neuzeit. 12°. *Leipzig*, 1863.

Schreber, D. G. N. Translation of Prof. Schreber's Pangymnastikon. *See* **Lewis,** Dio.

Schreber, Moritz. Illustrated in door gymnastics; or, a system of medico-hygienic exercises. Transl. from the German by H. Skelton. roy. 8°. *London and Edinburgh*, 1856.

Schreiber, Emanuel. Construction der Schraubenbolzen; bearb. v. *See* **Benoit-Duportail,** A. C. **240 Neuer Schauplatz der Künste.**

——— Die Fabrication der künstlichen Blumen, nebst der Federschmückerei. *Illus.* 8°. *Weimar*, 1855. **219 Neuer Schauplatz der Künste.**

——— Gehülfe für Haus- und Stubenmaler; übersetzt v. *See* **Barber,** E., and others. **204 Neuer Schauplatz der Künste.**

——— Die Glasblasekunst auf der Glashütte und Glasbläserlampe. *Illus.* 8°. *Weimar*, 1849. **177 Neuer Schauplatz der Künste.**

——— Der Tabacks- und Cigarrenfabricant. *Illus.* 8°. *Weimar*, 1850. **183 Neuer Schauplatz der Künste.**

Schreiber, Emanuel. Die Verschönerungskunst von Glas-, Wand, Plafond- und Metalloberflächen. *Illus.* 8°. *Weimar*, 1858. **242 Neuer Schauplatz der Künste.**

——— Vollständiges Handbuch der Uhrmacherkunst; hrsg. v. *Illus.* 8°. *Weimar*, 1848. **171 Neuer Schauplatz der Künste.**

Schreiber, Paul. Handbuch der barometrischen Höhenmessungen. Anleitung zur Berechnung der Höhen aus barometrischen, thermometrischen und hygrometrischen Messungen; sowie zur Anstellung sämmtlicher bei den Höhenmessungen nöthigen Beobachtungen, unter besonderer Berücksichtigung der Surrogate für das Quecksilberbarometer (Aneroide, Thermobarometer). Mit Atlas. *Illus.* 8°. *Weimar*, 1877.

Schreibers. Joseph von. Die Milchwirthschaft im Innern grosser Städte und deren nächster Umgebung. Ein Handbuch für Milchviehhalter. 8°. *Prag*, 1847.

Schreiner, Henry, and **Stewart,** Franklin. The American gauger, simplified and complete. 12°. *Philadelphia*, 1850.

Schrocer, K. J. Bauernhaus. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Schröder, H. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH. **Polytechnischer** Verein.

Schroff, K. D. v. Arzneiwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

Schrötter, L. Instrumente für Laryngoskopie und Rhinoskopie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Schubarth, Ernst Ludwig. Handbuch der technischen Chemie und chemischen Technologie. B. 1–3. 4te Aufl. *Illus.* 8°. Atlas fol. *Berlin*, 1851.

——— Repertorium der technischen Literatur; bearb. v. *See* PRUSSIA. **Kgl.** Ministerium.

——— Verhandlungen des Vereins zur Beförderung des Gewerbfleisses in Preussen. *See* BERLIN.

Schubarth, Heinrich. Mittheilungen gemachter Erfahrungen und Beobachtungen über Flachscultur und Flachsbereitung. 8°. *Leipzig*, 1829.

Digitized by Google

Schubeler, F. C. Die Pflanzenwelt Norwegens. Ein Beitrag zur Natur- und Culturgeschichte Nord-Europas. Hrsg. auf Veranlassung des academischen Collegiums als Universitäts-Program. *Illus.* 4°. *Christiania*, 1873–75.

Schubert, Eduard. Der rationelle Brennereibetrieb, nebst Darstellung eines neuen Einmaischverfahrens, nach dem ein ⅛ höherer Spiritusertrag erzielt wird, als alle Einmaischmethoden gewähren. Bearbeitet von, mit einem Vorwort von Fr. Jul. Otto. 8°. *Braunschweig*, 1857.

Schubert, F. Posture, attitude and dress, for portraiture, by. *See* **Halleur,** G. C. H. **Weale's series, No. 79.**

——— Stellung und Kleidung der zu portraitirenden Personen, von. *See* **Halleur,** G. C. H. Kunst der Photographie.

Schubert, Gotthilf Heinrich von, Denkrede auf. *See* **Wagner,** A.

Schubert, Johann Andreas. Beitrag zur Berichtigung der Theorie der Turbinen. *Illus.* 8°. *Dessau*, 1850.

Schuh- und Stiefelmacher. Mit Berücksichtigung aller Erfindungen, Handwerksvortheile, Kunstgriffe und Geheimnisse; Anhang über Schuhflickerei, Holzschuhmacherei, Leistenschneiderei, Glanzwichsen, etc. Nach der Handwerks-Encyclopädie bearbeitet und mit Zusätzen versehen. *Illus.* 8°. *Ilmenau*, 1824. **11 Neuer Schauplatz der Künste.**

Schuller, Anton. Handbuch der Gesetze über ausschliessende Privilegien auf neue Erfindungen, Entdeckungen und Verbesserungen im Gebiete der Industrie, enthaltend den Originaltext der in bedeutenderen Staaten diessfalls geltenden Gesetze, Patente, Verordnungen u. dgl., mit nebenstehender deutscher Uebersetzung jener, die in fremden Sprachen erlassen wurden, und erläuternden Anmerkungen. 8°. *Wien*, 1843.

Schultz, Alexander. Zimmeröfen und Camine; bearb. von. *See* **Fournel, J. 150 Neuer Schauplatz der Künste.**

Schultz, Benjamin. An inaugural botanico-medical dissertation on the Phytolacca decandra of Linnæus. 8°. *Philadelphia*, 1795.

Schultz, C. H. Die Entdeckung der wahren Pflanzennahrung. Mit Aussicht zu

Schultz, C. H.—Continued.
einer Agrikulturphysiologie. 8°. *Berlin*, 1844.

Schultz, J. A. Das Ganze des Treppenbaues; bearb. von. *See* **Boutereau, C. 140 Neuer Schauplatz der Künste.**

Schultz, John H. American railroad journal; edited by. *See* **American.**

Schultze, *Gebr.* H. and R. Lehrbuch der Fabrikation von Mineralwässern, insbesondere von Selterser- und Sodawasser, sowie moussirenden Limonaden und künstlichen Champagner. 12°. *Berlin*, 1870.

Schulz, F. O. K. Neue Erfindung. Glas ohne jede Gefahr des Misslingens zu sägen. *Illus.* 8°. *Prenzlau*, 1856. pp. 23.

Schulz, Otto August. Allgemeines Bücher-Lexikon. B. 8 und 9. Hrsg. von. *See* **Heinsius,** J. W.

Schulze, Franz. Lehrbuch der Chemie für Landwirthe. Zum Gebrauche bei Vorlesungen. B. 1–2. 8°. *Leipzig*, 1846.

Schulze, Friedrich G. Die deutsche Zuckerfrage, mit besonderer Beziehung auf die Runkelzuckerfabrikation. Nebst einem Aufsatze über den Freiherrn von Stein. 8°. *Jena*, 1850.

——— Nationalökonomie, oder Volkswirthschaftslehre, vornehmlich für Land-, Forst- und Staatswirthe. 8°. *Leipzig*, 1856.

——— Praktischer Unterricht in dem Bau der deutschen, englischen, französischen und ungarischen Reitsättel, sowie über den Bau der deutschen und englischen Kummte, ihrer Aufpassung und Lage. Nebst einem Anhang über die Riemerarbeit der Halftern, Zäume und Geschirre. *Illus.* 12°. *Ilmenau*, 1827. **27 Neuer Schauplatz der Künste.**

——— Selbstständigkeit des deutschen Universitätsgeistes. 8°. *Jena*, 1843.

——— Thaer oder Liebig? Versuch einer wissenschaftlichen Prüfung der Ackerbautheorie des Liebig, besonders dessen Mineraldünger betreffend. 8°. *Jena*, 1846.

Schulze, Heinrich. Der Gold- und Silberarbeiter. *Illus.* 4te Aufl. 8°. *Weimar*, 1846. **8 Neuer Schauplatz der Künste.**

Schumann, J. Die Diatomeen der hohen Tatra. *Illus.* 8°. *Wien*, 1867.

Digitized by Google

Schumann, Ludwig Friedrich. Die Kunst durchsichtiges Porzellan und weisses Steingut mit durchsichtiger Glasur anzufertigen. *Illus.* 8°. *Weimar*, 1835. **75 Neuer Schauplatz der Künste.**

Schür, Otto. Die Praxis der Hohlglas-Fabrikation. Ein auf mehrjährige Erfahrungen gestütztes Handbuch für Glashütten und Techniker. 8°. *Berlin*, 1867.

Schutzenberger, M. P. Traité des matières colorantes; comprenant leurs applications à la teinture et à l'impression, et des notices sur les fibres textiles, les épaississants et les mordants. T 1-2. 8°. *Paris*, 1867.

Schwab, E., and others. Volks- und Mittelschule. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Schwäbische (Der) Bauernfreund, 1870. Zu Nutz und Lehr des Bauernstandes. Hrsg. von Fritz Möhrlin. sm. 4°. *Stuttgart*, 1870.

Schwamkrug, Fr. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse,** J. A.

Schwamkrug. Reinhold, and **Bischoff,** F. Atlas des Bergwesens. 8°. *Leipzig*, 1874.

Schwanert, Hugo. Hülfsbuch zur Ausführung chemischer Arbeiten, für Chemiker, Pharmaceuten und Mediciner. 2te Aufl. 8°. *Braunschweig*, 1874.

Schwann, Th. Microscopical researches into the accordance in the structure and growth of animals and plants; transl. from the German, by Henry Smith. 8°. *London*, 1848.

Schwarz, F. Der Brückenbau, zusammengestellt von. *Illus.* fol. *Berlin*, 1866.

——— Vorträge über Seeufer- und Hafenbau. 8°. *Berlin*, 1865.

Schwarz, H. Die Chemie und Industrie unserer Zeit; die wichtigsten chemischen Fabrikationszweige. 2 Bde. *Breslau*, 1857-62.

——— Praktische Anleitung zu Maaszanalysen. 8°. *Braunschweig*, 1853.

Schwarz, Heinrich. Fettwaaren und Producte der trockenen Destillation. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe, 3.**

Schwarz, *Rabbi* Joseph. A descriptive geography, and brief historical sketch of Palestine; transl. by Isaac Leeser. *Philadelphia*, 1850.

Schwarz, *Rabbi* Joseph—Continued.

Schwebelé, Édouard. Catalogue des ouvrages anglais et américains de la bibliothèque de l'école impériale des ponts et chaussées. *See* PARIS. **L'école impériale des ponts et chaussées.**

Schweigger-Seidel, F. W. Journal für praktische Chemie, hrsg. v. *See* **Journal.**

Schwerdtner, Julius, **Löwy,** Josef, and **Lieb,** F. Graveur- und Guillochirarbeiten. Photographie. Decorations-Zeichnungen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

Schwerz, Johann Nepomuck v. Anleitung zum praktischen Ackerbau. 3 Bde 8°. *Stuttgart und Tübingen*, 1837.

——— Landwirthschaftlicher Nachlass. Enthaltend die Cultur der Handelsgewächse als Ergänzung des 3ten B. seiner Anleitung zum practischen Ackerbau und Sammlung zerstreuter Blätter und Auszüge über verschiedene landwirthschaftliche Gegenstände. Bearbeitet und hrsg. von H. W. v. Pabst. 8°. *Stuttgart und Tübingen*, 1845.

SCIENCE. *See, also,* **Natural science,** *and names of the various branches; as,* **Chemistry, Geology,** *etc.*

——— *See* PHILADELPHIA. **Internat. exhib. 1876, Group 28.**

——— and mechanism. Illustrated by examples in the New York exhibition of 1853-54. Extended descriptions of the most important contributions in the various departments. Ed. by C. R. Goodrich. 4°. *New York*, 1854.

——— L'année scientifique. *See* **Figuier,** G. L.

——— Annuaire du cosmos. *See* **Annuaire**

——— Annual of scientific discovery. *See* **Wells,** D. A.

——— Applications de la science à l'industrie et aux arts. *See* **Figuier,** G. L.

——— Arcana of. *See* **Timbs,** J.

——— Boston journal of philosophy and the arts. *See* **Webster,** J. W.

——— The British encyclopædia, or dictionary of arts and sciences. *See* **Nicholson,** William.

——— Causeries scientifiques. *See* **Parville,** Henri de.

Digitized by Google

SCIENCE. La chambre noire et le microscope. *See* **Girard,** Jules.

——— Comte's philosophy of. *See* **Comte,** Auguste.

——— Curiosities of. *See* **Timbs,** John.

——— Dictionary of. *See* **Brande,** W. T.

——— Dictionary of. *See* **Brande,** W. T., and **Cauvin,** J.

——— during the middle ages. *See* **Wright,** Thomas.

——— Glossary of scientific terms. *See* **Henry,** A.

——— gossip, Hardwicke's. *See* **Hardwicke's.**

——— Handbook to collection of scientific apparatus. *See* **Handbook. South Kensington art and science handbooks, No. 9.**

——— Index to foreign scientific periodicals in the patent office library. *See* GREAT BRITAIN. **Great seal patent office.**

——— Journal of science and arts. Ed. by B. Silliman. *See* **American** journal.

——— König Maximilian II. und die Wissenschaft. *See* **Dollinger,** J. v.

——— Kunst landwirthschaftlicher Verwaltung. *See* **Walz,** Gustav.

Science lectures for the people, delivered in the Hulmetown hall, in the years 1874–76. 8°. *Manchester, London,* 1874–76———.

Series 1.

Elementary chemistry; four lectures. By H. E. Roscoe.
Zoology; four plans of animal creation. By T. Alcock.
Coal; its importance in manufacture and trade. By W. S. Jevons.
Elementary physiology; four lectures. By John Edward Morgan.

Series 2.

Coral and coral reefs. By T. H. Huxley.
Spectrum analysis. By H. E. Roscoe.
Spectrum analysis in its application to the heavenly bodies. By W. Huggins.
Our coal fields. By W. Boyd Dawkins.
Charles Dickens. By A. W. Ward.
Natural history of paving stones. By Williamson.
Temperature and animal life of the deep sea. By W. B. Carpenter.
More about coal; how coal and the strata in which it is found, were formed. By A. H. Green. *Illus.*
The sun. By J. N. Lockyer.

Series 3.

Yeast. By T. H. Huxley.
Coal colours. By H. E. Roscoe.
The origin of the English people. By Wilkins.
Food for plants. By Odling.

Science—Continued.

Unconscious action of the brain. By W. B. Carpenter.
Epidemic delusions. By W. B. Carpenter.
The progress of sanitary science. By H. E. Roscoe.

Series 4.

The rainbow. By H. E. Roscoe.
The ice age in Britain. By Geikie.
The sun and the earth. By Balfour Stewart.
Atoms. By Clifford.
Flame. By Core.
Life of Faraday. By J. H. Gladstone.
The star depths. By R. A. Proctor.
Kent cavern. By William Pengelly.
Electrical discoveries of Faraday. By W. F. Barrett.
Ancient and modern Egypt, or, the pyramids and the Suez canal. By W. B. Carpenter.

Series 5.

Polarisation of light. By William Spottiswoode.
Fertilisation of flowers. By A. W. Bennett.
Parasites. By T. Spencer Cobbold.
Gun cotton. By F. A. Abel.
Animal mechanics. By S. M. Bradley.
The senses. By G. Croom Robertson.
On muscle and nerve. By Gamgee.
The time that has elapsed since the era of the cave men of Devonshire. By William Pengelly.

Series 6.

Crystalline and molecular forces. By John Tyndall.
John Dalton and his atomic theory. By H. E. Roscoe.
The transit of Venus. By William Huggins.
Joseph Priestley; his life and chemical work. By Thorpe.
The geographical distribution of mammals. By P. L. Sclater.
Earthquakes and volcanoes. By W. C. Williamson.
Modern savages. By Sir John Lubbock.
Palestine explorations. By C. R. Wilson

Series 7.

Arctic discovery. By J. E. Davis.
Soap bubbles. By Rücker.
Birds of the globe. By R. Bowdler Sharpe.
Great extinct quadrupeds. By J. Martin Duncan.
Cavendish and his discoveries. By Thorpe.
Functions of the brain. By Ferrier.
Food. By Henry E. Armstrong.
The age of the men of Kent's cave. By William Pengelly.

——— Lexicon of terms ancient and modern in medical and in general science. *See* **Mayne,** R. G.

——— Light science for leisure hours. *See* **Proctor,** Richard A.

——— Literary and scientific class book. *See* **Leonard,** Levi W.

——— London journal of arts and sciences. *See* **London** journal.

Digitized by Google

SCIENCE, Magazine of. *See* **Magazine.**
——— Magazine of popular. *See* **Magazine.**
——— Manual of science and arts; photographic miscellany. *See* **Manual.**
——— Manual of scientific enquiry. *See* **Herschel**, J. F. W.
——— Mathesis Caesarea, sive Amussis Ferdinandea. *See* **Schott**, P. Gasparus.
——— Miscellaneous. *See* **Miscellanea scientifica curiosa.**
——— Miscellaneous. 8°. *London*, 1753–1809. *n. t. p.* [This volume is composed of the following treatises bound together:]

CONTENTS.

The analysis of beauty; written with a view of fixing the fluctuating ideas of taste. By William Hogarth.
The changes produced in atmospheric air and oxygen gas by respiration. By W. Allen and W. H. Pepys.
Ethic amusements. By D. Bellamy.
Ethic tales and fables. By François de S. de La M. Fénelon. Transl. from the French, by D. Bellamy. *Illus.*
Filtration by ascent. By James Peacock. *Illus.*
Foot of the living horse; changes produced by shoeing, and causes of the apparent mystery of the art. By Bracy Clark. *Illus.*
On the corrosion of leaden pipes by water. [Manuscript.]
The prophecy; odes and a sonnet. By D. Bellamy.
Trigonometrical survey. By Roy.

——— Molecular and microscopic. *See* **Somerville**, Mary.
——— Objects, advantages and pleasures of. By Lord Brougham. *See* LONDON. **Society of useful knowledge, v. 1.**
——— (The) of rights. *See* **Fichte**, J. G.
——— On the decline of science in England. *See* **Babbage**, C.
——— The poetry of. *See* **Hunt**, R.
——— Proceedings of the American association for the advancement of. *See* **American association.**
——— Progress of, in England. *See* **Halliwell**, James Orchard.
——— Railway magazine and annals of. *See* **Railway magazine.**
——— record. A compendium of scientific progress and discovery; ed. by Alfred E. Beach. v. 1–6, 1872–76. 12°. *New York*, 1872–76——.
——— Report of the British association for the advancement of. *See* **British association.**
——— Report on apparatus of the exact sciences, by F. A. P. Barnard. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 3.**
——— Scientific addresses. *See* **Tyndall**, John. **University series, v. 5.**
——— Scientific dialogues. *See* **Joyce**, J.
——— Scientific memoirs. *See* **Taylor**, R.
——— Traveller's remembrancer. *See* **Jackson**, J. R.
——— Treasury of natural and physical. *See* **Schoedler**, F.
——— Year-book of facts in. *See* **Timbs**, J.

SCIENCES. *See, also,* **Encyclopædia, Periodicals,** *and* **Transactions.**
——— Account of Bacon's Novum organon scientiarum. *See* **Hoppus**, J.
——— Annales des sciences physiques et naturelles. *See* LYONS.
——— Bibliothèque physico-économique. *See* **Bibliothèque.**
——— Curiosities of the applied. *See* **Dodd**, G.
——— Cyclopædia of. *See* **Partington**, C. F.
——— Dictionary of the arts, sciences and manufactures. *See* **Francis**, G. W.
——— Dictionnaire des sciences. *See* **Courtin**, E. M. P. M. A. Encyclopédie moderne.
——— Dictionnaire des sciences, des lettres et des arts. *See* **Bouillet**, M. N.
——— History of the arts and sciences of the antients. *See* **Rollin**, Charles.
——— History of the inductive. *See* **Whewell**, William.
——— Mémoires de la Société des sciences. *See* STRASBOURG.
——— De l'origine des sciences et de leurs progrès chez les anciens. *See* **Goguet**, A. Y.
——— Papers and proceedings of the Royal society of Van Diemen's Land. *See* HOBART TOWN.
——— Report of the National academy of sciences. *See* **National academy.**
——— Report of the Royal society of Tasmania. *See* HOBART TOWN.
——— Schweizerische naturforschende Gesellschaft. Verhandlungen. *See* SWITZERLAND.
——— Sitzungsberichte der königlichen bayerischen Akademie. *See* MUNICH. **Akademie der Wissenschaften.**
——— Ueber königliche Massnahmen für das Gedeihen der Wissenschaften. *See* **Thiersch**, F.

Digitized by Google

Scientific (The) American. Advocate of industry and enterprise, and journal of mechanical and other improvements. 1st series, v. 1–14, 1845–1859. New series, v. 1–36, 1860–1877. fol. and 4°. [Supplement, 2 v. bound in 1, 1876-77.] *New York*, 1845–77——.

——— biography. *See* **Poggendorff**, J. C.

——— farming made easy. *See* **Fletcher**, Thomas C.

——— London. *See* **Becker**, Bernard H.

——— (The) mechanic, inventor's advocate, patent-office reporter, and expositor of arts and trades. v. 1, No. 1–25, 1847–48. fol. [*New York and Washington*, 1847–48.] *n. t. p.*

——— memoirs. *See* **Taylor**, R.

——— men, Biographies of distinguished. *See* **Arago**, D. F. J.

——— men. Lives of literary and scientific men of Italy, etc. *See* **Shelley**, M. W., and others. **Lardner's cabinet cyclopædia, v. 88, 89.**

——— Lives of scientific men of France. *See* **Shelley**, M. W. **Lardner's cabinet cyclopædia, v. 91, 92.**

——— Notices scientifiques. *See* **Arago**, François.

——— opinion. A weekly record of scientific progress at home and abroad. v. 1–3. 4°. *London*, 1869–70.

——— (The) review and journal of the Inventors' institute. v. 1–12, 1866–76. fol. *London*, 1866–77. [Changed to 'Scientific and literary review' from v. 8.]

——— terms, Explanation of; by D. Booth. LONDON. **Society of useful knowledge, v. 1.**

——— use of the imagination. *See* **Tyndall**, John. Scientific addresses. **University series, No. 5.**

Sclater, P. L. Geographical distribution of mammals. **Scientific lectures for the people, series 6.**

——— Natural history review; ed. by. *See* **Natural** history.

Scoffern, John. Adulterations of food, and artificial illumination; by. *See* **Gore**, G., **Sparling**, M., and **Scoffern**, J.

——— The chemistry of artificial light; including the history of wax, tallow and sperm candles; the manufacture of gas, their various illuminating powers compared with animal and vegetable oils, and a descriptive sketch of lamps and other apparatus. 8°. *London*, 1856. **Orr's circle of the sciences, v. 7.**

——— Elementary chemistry of the imponderable agents and of the inorganic bodies; including light, heat, electricity and magnetism; the simple chemical bodies, and their inorganic compounds. 8°. *London*, 1855. **Orr's circle of the sciences, v. 6.**

——— Lectures on some of the arts connected with organic chemistry; arranged by. *See* **Brande**, W. T.

——— Meteorology; by. *See* **Young**, J. R., and others. **Orr's circle of the sciences, v. 5.**

——— New resources of warfare, with especial reference to rifled ordnance, in their chief known varieties, including authenticated weight, measurement and mode of construction of Armstrong's wrought iron breech-loading guns; with an account of their shells and fuses. Being a supplement to 'Projectile weapons of war and explosive compounds'. *Illus.* 8°. *London*, 1859. [2 copies.]

——— Outlines of botany; a description of lichens, fungi, ferns, and sea-weeds. 8°. *London*, 1858.

——— Projectile weapons of war and explosive compounds. 3d ed. 8°. *London*, 1858.

——— Weapons of war. A history of projectiles and explosive compounds. 16°. *London*, 1854.

——— and others. The useful metals and their alloys, including mining ventilation, mining jurisprudence, and metallurgic chemistry employed in the conversion of iron, copper, tin, zinc, antimony, and lead ores; with their applications to the industrial arts. 8°. *London*, 1857.

Scoresby, William. Journal of a voyage to Australia and round the world, for magnetical research. Ed. by Archibald Smith. 8°. *London*, 1859.

——— Magnetical investigations. Part 1–2. 8°. *London*, 1829–44.

SCOTLAND. Highland and agricultural society. Transactions. v. 1, 1859–61; v. 2, 1861–63; v. 3, 1863–65. 8°. *London and Edinburgh*, 1859–65. [†]

——— History of. *See* **Scott**, *Sir* Walter, **Lardner's cabinet cyclopædia, v. 13. 14.**

Digitized by Google

SCOTLAND, Journal of the Photographic society of. *See* **Photographic** notes.

—— Scottish cryptogamic flora. *See* **Greville**, Robert Kaye.

—— Transactions of the Royal Scottish society of arts. *See* **Royal** Scottish society.

Scott, —. On photo-zincography and other photographic processes, employed at the ordnance survey office, Southampton, under the direction of Sir Henry James. *Illus.* 2d ed. 4°. *London*, 1863. pp. 16.

Scott, David. The engineer and machinist's assistant; a series of plans, sections and elevations of steam engines, spinning machines, mills for grinding tools, etc.; descriptions and instructions for drawing machinery; with an introduction and essay on various departments of machinery. 2 v. fol. *Edinburgh*, 1847.

Scott, Henry L. Military dictionary; comprising technical definitions; information on raising and keeping troops; actual service, including makeshifts and improved materials; law, government, regulation, and administration relating to land forces. 8°. *New York*, 1861.

Scott, Robert. Greek-English lexicon. *See* **Liddell**, H. G.

Scott, Robert. Practical cotton spinner and manufacturer; or managers, overlookers, and mechanics' companion. 8°. *Preston*, 1840. Also, 2d ed. *London*, 1846.

—— Same. Am. ed., with plates of American machines, by Oliver Byrne. *Philadelphia*, 1851.

—— A treatise on the ventilation of coal mines, with a narrative of scenes and incidents, from the life of a practical miner. 8°. *London*, 1863.

Scott, Robert H. Blowpipe characters of minerals. *See* **Smith**, A.

—— A handbook of volumetrical analysis. 8°. *London*, 1862.

Scott, *Sir* Walter. The history of Scotland. 2 v. 16°. *London*. **Lardner's cabinet cyclopædia, v. 13, 14.**

Scott, William. Cotton spinner and manufacturer; compiled by. *See* **Scott**, R.

Scott, William. The house book, or family chronicle of useful knowledge, and cottage physician; containing medicine, cookery, diet, general economy, health, sea-bathing, gardening, manufactures, arts, etc., with various branches of domestic concerns. 8°. *London*, 1826.

SCOURING, Art de dégraisser les tissus. *See* **Martin**, E. **Encyclopédie populaire, v. 9.**

—— Art of. *See* **Love**, T.

—— Das Beizen, Schleifen und Poliren. *See* **Schmidt**, Wilhelm. **107 Neuer Schauplatz der Künste.**

SCREW propellers and their steam engines. *See* **Nystrom**, J. W.

—— —— for carriages, etc. **Abridgments English Patents, No. 7.**

—— —— for ships. **Abridgments English Patents, No. 5.**

—— —— On paddle wheels and the screw; by G. Rennie. *See* **Tredgold**, T. **Steam engine, v. 3.**

—— —— Treatise on. *See* **Bourne**, John.

—— propulsion, Treatise on modern. *See* **Burgh**, N. P.

SCREWS. Abridgments English Patents, No. 58.

—— Construction der Schraubenbolzen. **204 Neuer Schauplatz der Künste.**

SCRIPTURE gazetteer. *See* **Biblical** atlas.

—— history, biography, geography, literature. *See* **Potter's.**

Scrivenor, Harry. A comprehensive history of the iron trade throughout the world, from the earliest records to the present period. With an appendix containing official tables and other documents. 8°. *London*, 1841.

Scrope, G. Poulett. The geology and extinct volcanos of Central France. 2d ed. 8°. *London*, 1858.

Scudder, John M. Domestic medicine or home book of health; a treatise on anatomy, physiology, hygiene, materia medica, surgery, practice of medicine and nursing. 8°. *Cincinnati*, 1865.

—— The eclectic practice of medicine. Rev. ed. roy. 8°. *Cincinnati*, 1870.

SCULPTURE, Art of, in wood. *See* **Williams**, R. F.

—— Arts and sciences of the antients. *See* **Rollin**, Charles.

—— Bildende Kunst der Gegenwart Sculptur. Von Josef Langl. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 25.**

—— Catalogue of books on. *See* **Pollen**, J. H.

Digitized by Google

SCULPTURE. Handbook of ancient and modern sculpture. *See* **Westmacott,** R.

——— Handbook to the courts of modern sculpture. Crystal palace. *See* **Jameson,** *Mrs.* A. **Crystal palace library, v. 2.**

——— Die Kunst des Bildhauers. See **Matthaeÿ,** C. L. **52 Neuer Schauplatz der Künste.**

——— Malerei und Sculptur. Carl Costenoble. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 15.**

——— Manuel du sculpteur. *See* **Arsenne,** L. C. **21 Manuels Roret.**

——— La sculpture au salon de 1861. *See* **Lagrange,** L.

——— Zinkguss-Ornamente, etc. *See* **Geiss,** Moritz.

Sculteius, Johannes. Magazyn ofte wapenhuys. *Illus.* sm. 8°. *Tot Dordrecht,* 1657.

SEA officer's sheet anchor, The young. *See* **Lever,** Darcy.

——— Révolutions de la mer. *See* **Adhémar,** A. J.

——— The temperature and animal life of the deep sea. *See* **Science lectures for the people, series 2.**

SEALING-wax. Manuel du fabricant de cire à cacheter. *See* **Le Normand,** L. S. **64 Manuels Roret.**

——— Die Siegellackfabrikation. *See* **Harzer,** F. **170 Neuer Schauplatz der Künste.**

Seaman, David. Fruit raiser's and farmer's guide and receipt book. Containing good rules for raising fruit, upon different forms and arts, collected with great care from the best authorities. 12°. *Cincinnati,* 1853.

Seaman, Ezra C. Essays on the progress of nations, in civilization, productive industry, wealth, and population. *Illus.* 12°. *New York,* 1852. 2d series, 1868.

——— Supplement to essays on the progress of nations, etc. *Illus. New York,* 1848.

SEAMAN'S friend, The. *See* **Dana,** R. H., *jr.*

SEAMANSHIP, Elements and practice of rigging and. *See* **Elements.**

——— illustrated with designs. *See* **Luce,** S. B.

——— Inquiry relative to various important points of. *See* **Tinmouth,** N.

SEAMANSHIP. The kedge anchor, or young sailor's assistant. *See* **Brady,** W.

——— Key to practical. *See* **Lever,** D.

SEALS, Roman. Siglarium Romanum. *See* **Gerrard,** John.

SEASIDE (The), and aquarium. *See* **Harper,** John.

——— studies in natural history. *See* **Agassiz,** Elizabeth C. and Alexander.

Sears, Barnas. Thesaurus of English words and phrases; ed. by. *See* **Roget,** P. M.

Seaward, John. Observations on the rebuilding of London bridge; demonstrating the practicability of executing that work in three flat, elliptical arches of stone, each two hundred and thirty feet span: with an examination of the arch of equilibrium, proposed by Hutton; and an investigation of a new method for forming an arch of that description. *Illus.* 8°. *London,* 1824.

Secchi, A. Electrical rheometry. **Smithsonian contrib., v. 3.**

Seckendorff, W. von. Ueber die beim Gebirgsbohren angewendeten Meissel oder Versuch, deren Form auf bestimmte wissenschaftliche Principe hinzuführen. *Illus.* 8°. *Berlin,* 1862. pp. 46.

SECRET remedies. De secretis. *See* **Weckerus,** Joan. Jacobus.

——— ——— Taschenbuch der Geheimmittellehre. *See* **Wittstein,** G. C.

——— societies of the middle ages. Die geheimen Gesellschaften des Mittelalters. *See* **Geheimen.**

——— ——— in China. *See* BATAVIA. **Verhandelingen, etc., Deel 33.**

——— writing. Cryptomenusis patefacta. *See* **F.,** J.

Secretan and Lerebours. Catalogue des instruments d'optique, etc. *See* Lerebours and Secretan.

SECRETORY system of nerves. *See* **Campbell,** Henry Fraser.

SECTOR, Description of the. *See* **Description.**

Sédillot, Louis Pierre Eugène Amélie. Matériaux pour servir à l'histoire comparée des sciences mathématiques chez les Grecs et les Orientaux. T. 1–2. 8°. *Paris,* 1845–49.

Seely, Charles A. The ambrotype; treatise on the art of producing collodion positives. 18°. *New York,* 1857. pp. 46.

Digitized by Google

Seely, Charles A. American journal of photography; ed. by. *See* **American.**

Seerig, A. W. H. Armamentarium chirurgicum; oder möglichst vollständige Sammlung von Abbildungen und Beschreibung chirurgischer Instrumente älterer und neuerer Zeit. B. 1-2. 8°. [pl. fol.] *Breslau,* 1838.

Seger, August Hermann. Die technische Verwerthung Schwefelkies führender Schiefer und Thone der Stein- und Braunkohlenformation. 8°. *Neuwied und Leipzig,* 1869. pp. 42.

Seguin, *aîné.* Mémoire sur l'aviation ou navigation aérienne. Extrait du Cosmos. 8°. *Paris,* 1866. pp. 23.

——— Mémoire sur les causes et sur les effets de la chaleur, de la lumière et de l'électricité. 8°. *Paris,* 1865.

Seguin, E. Rep rt on education. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Seguin, Edward. Idiocy, and its treatment by the physiological method. roy. 8°. *New York,* 1866.

Seidel, Johann Julius. Die Orgel, und ihr Bau. Hrsg. von C. Kuntze. 3te Aufl. 12°. *Leipzig,* 1875.

Seidel, Ludwig. Bemerkungen über den Zusammenhang zwischen dem Bildungsgesetze eines Kettenbruches und der Art des Fortgangs seiner Näherungsbrüche. 4°. *München,* 1855. pp. 44.

——— Resultate photometrischer Messungen an zweihundertundacht der vorzüglichsten Fixsterne. *Illus.* 4°. *München,* 1862.

——— Untersuchungen über die Lichtstärke der Planeten Venus, Mars, Jupiter und Saturn, verglichen mit Sternen. 4°. *München,* 1859.

Seidler, Ferdinand. Anleitung zur Berechnung und Construction der Fässer von allen üblichen Formen. *Illus.* 8°. *Weimar,* 1858. **239 Neuer Schauplatz der Künste.**

Seiler, Emma. The voice in singing; transl. from the German of, by a member of the American philosophical society. 12°. *Philadelphia,* 1868.

Seillon, J. Tissage des rubans. Cours théorique et pratique, comprenant les éléments de basse-lisse, tambours, jacquart, disposition en teinture, prix de revient et harmonie des couleurs; avec 21 planches. 8°. *Paris,* [1872].

Seliger, Conrad. Handbuch der Drehkunst. *Illus.* pl. 60. 4°. *München,* 1846. pp. 28.

Seller, John. Practical navigation; introduction to the whole art, containing many useful and geometrical definitions and problems; the doctrine of plain and spherical triangles, etc. 2d ed. sm. 4°. *London,* 1672.

Sellers, brothers. Catalogue of patent wrought iron bridge railings. 4°. *Philadelphia, n. d.*

Sellers, George Escol. Improvements in locomotive engines and railways. 4°. *Cincinnati,* 1849. pp. 26.

Sellers, John. The color mixer; four hundred receipts for colors, pastes, acids, pulps, blue vats, liquors, etc., for cotton and woollen goods; including delaines. 12°. *Philadelphia,* 1865.

Selwyn, A. R. C. Catalogue of the Victorian exhibition, 1861. *See* **Archer,** W. H.

SEMMERING, Mittel zum Betriebe der Eisenbahn über den. *See* **Schmid,** A. von.

Semper, Gottfried. Origin of polychromy. Apology for the colouring of the Grecian court. *See* **Jones,** O. **Crytsal palace library, v. 1.**

Semrad, G., and **Sterbenz,** Johann. Bewaffnung und Artillerie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

Senefelder, Aloys. Collection de plusieurs essais en dessins et gravures, pur servir de supplément á l'instruction pratique de la lithographie. 4°. *Paris* [†], 1819.

——— A complete course of lithography, to which is prefixed a history; with a preface, by Frederick von Schlichtegroll. Transl. from the original German, by 4°. *London,* 1819.

Sennewald, Georg. Lehr- und Musterbuch der einfachen Linnen- und Tischzeugweberei. *Illus.* 8°. *Weimar,* 1840. **106 Neuer Schauplatz der Künste.**

Seoane. Dictionary of the Spanish and English languages; ed. by. *See* **Neuman,** H.

SEPULCHRES of Etruria. *See* **Gray,** *Mrs.* Hamilton.

Series (A) of executed examples of ecclesiastical and domestic structures, from the designs of modern architects. *Illus. London,* 1858.

Digitized by Google

SERPENT symbol in America, The. *See* **Squier**, E. G.

SERPENTS, Catalogue of North American. By S. F. Baird and C. Girard. **Smiths'n misc. coll., v. 2.**

Serrell, Lemuel W. In the matter of the cross opposition of Francis Bernard de Keravenan and William Henry Racey, to the grant of her majesty's royal letters patent, Nos. 2,398 and 2,530, 1860; in improvements in lamps, etc. Hearing before her majesty's law officer. Argument in behalf of de Keravenan. [Appended is the testimony in the matter of the cross opposition of Keravenan and Racey.] *n. t. p. n. d.*

Servière, Joseph. Oenologie; nach dem Französ. von. *See* **Aubergier. 29 Neuer Schauplatz der Künste.**

Sestini, Benedict. Elementary algebra. 12°. *Baltimore*, 1854.

——— Elements of geometry and trigonometry. 8°. *Baltimore*, 1856.

——— A treatise on algebra. 12°. *Baltimore*, 1855.

Settegast, H. Fünfundzwanzig Jahre Fortschritt auf dem Gebiete der Landwirthschaft. 8°. *Breslau*, 1872.

Seue, C. de. Le névé de Justedal et ses glaciers, par. Programme de l'université du second semestre, 1870. Publié par les soins du sénat académique, par S. A. Sexe. *Illus.* 4°. *Christiania*, 1870.

——— Windrosen des südlichen Norwegens. Mit der Goldmedaille König Carls XV belohnte Abhandlung von. Universitäʻsprogram für das erste Semester 1876. Hrsg. von H. Mohn. *Illus.* pl. 44. 4°. *Kristiania*, 1876. pp. 40.

SEWAGE. American gas-light journal. *See* **American.**

——— Canalisation und Abfuhr. *See* **Pettenkofer**, Max v.

——— Composition and value of. *See* **Lawes**, J. B., and **Gilbert**, J. H.

——— Defects of house-drainage, and their remedies. *See* **Philbrick**, Edward S.

——— Draining for profit and draining for health. *See* **Waring**, George E.

——— Fosses d'aisances, latrines, urinoirs et vidanges. *See* **Liger**, F.

——— question, The. *See* **Krepp**, Frederick Charles.

——— Reinigung und Entwässerung der Stadt Berlin. *See* **Weide**, E.

SEWAGE. The sanitary drainage of houses and towns. *See* **Waring**, George E., *jr.*

——— Third report on. *See* GREAT BRITAIN. **Sewage**, etc.

——— Utilisation of. *See* **Menzies**, William

——— utilization, Sewerage and. *See* **Corfield**, W. H. **Van Nostrand science series, No. 18.**

Sewell, John. Elementary treatise on steam, extended. *See* **Clark**, D. Kinnear. An elementary treatise on steam.

——— Management of a locomotive engine. *See* **Tredgold**, T. **Steam engine, v. 1.**

SEWERAGE. *See* **Sewage.**

SEWERS. Abridgments English Patents, No. 1.

——— Ventilation of public. *See* **Rowell**, G. A.

SEWING. Abridgments English Patents, No. 2.

——— machine attachments. *See* **Gregory**, George W.

——— machines, apparatus and implements used in. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 22.**

——— ——— Decisions in the cases of O. B. Potter and N. Wheeler vs. J. G. Wilson and A. C. Stockmarr, etc. *See* **Nelson**, S., and **Smalley**, D. C. A.

——— ——— Näh-Strick- und Stickmaschinen. Von Karl Kohn. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

——— ——— Die Nähmaschine. *See* **Herzberg**, R.

——— ——— Report on. By G. A. Fairfield. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1876, v. 3.**

Sexe, S. A. Jaettegryder og gamle Strandlinier i fast Klippe. Med Traesnit. Universitetsprogram for første Semester 1874. 4°. *Christiania*, 1874. pp. 44.

——— Maerker efter en iistid i omegnen af Hardangerfjorden. Udgivet som Universitetsprogram for første Halvaar 1866. Hermed et kart og nogle i Texten indtagne Traesnit. 4°. *Christiania*, 1866. pp. 34.

——— Le névé de Justedal et ses glaciers. *See* **Seue**, C. de.

SEXOLOGY as the philosophy of life. *See* **Willard**, Elizabeth O. G.

Shadbolt, George. British journal of photography; ed. by. *See* **British.**

Digitized by Google

SHADES and shadows. *See, also,* **Perspective.**

——— and shadows. *See* **Davies,** Charles.

Shadwell, Charles F. A. Notes on the management of chronometers; and the measurement of meridian distances. 8°. *London,* 1861.

Shaffner, Taliaferro P. Telegraph companion, devoted to the science and art of the Morse American telegraph. 2 v. 8°. *New York,* 1854-55.

——— The telegraph manual; history and description of the semaphoric, electric and magnetic telegraphs of Europe, Asia, Africa, and America, ancient and modern. *Illus.* 8°. *New York,* 1859.

Shakespeare, William, Autograph of. *See* **Wise,** George.

——— Delineations of insanity, imbecility and suicide. *See* **Kellogg,** A. O. [†]

——— The English of. *See* **Craik,** George L.

SHARON water, Analysis of. *See* **Fonda,** Sebastian F.

Sharpe, R. Bowdler. The birds of the globe. **Science lectures for the people, series 7.**

Sharpe, Samuel. Monuments of Egypt, by. *See* **Jones,** O., and **Bononi,** J. Egyptian court. **Crystal palace library, v. 1.**

Sharswood, George. An essay on professional ethics. 8°. *Philadelphia,* 1869.

——— Law of evidence; notes by. *See* **Starkie,** T.

Shaw, Edward. Civil architecture; a complete system of building. 4th ed. *Illus.* 4°. *Boston,* 1836.

Shaw, George. A manual of electro-metallurgy. 2d ed. 8°. *London,* 1844.

Shaw, Henry. The encyclopedia of ornament. 59 pl. 4°. *London,* 1842.

——— Examples of ornamental metal work; drawn and engraved by. 49 pl. 4°. *London,* 1836.

——— Specimens of tile pavements. 4°. *London,* 1858.

Shaw, Oliver A. A description of the visible numerator; instructions for its use. 8°. *Boston,* 1832.

Shaw, *Major* Samuel. His journals and life. *See* **Quincy,** Josiah.

Shaw, Thomas B. A complete manual of English literature; edited, with notes and illustrations, by William Smith; with a sketch of American literature, by Henry T. Tuckerman. 12°. *New York,* 1867.

Shaw, Thomas B.—Continued.

Shaw, Thomas George. Wine, the vine and the cellar. 2d ed. 8°. *London,* 1864.

SHAWLS. Von Emanuel Thieben. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Shea, John Gilmary. Discovery and exploration of the Mississippi valley, with the original narratives of Marquette, Allouez, Membré, Hennepin, and Anastase Douay. 8°. *New York,* 1852.

Shecut, John L. E. W. Flora Carolinæ-ensis, or a historical, medical and economical display of the vegetable kingdom. v. 1. 8°. *Charleston,* 1806.

Shedd, J. H., and **Edson,** —. Suggestions on ventilation. 8°. *Boston,* 1865.

Shee, Martin Archer. Elements of art: a poem, in six cantos, with notes and a preface. 8°. *London,* 1809.

SHEEP, breeds, management and diseases. *See* **Youatt,** William.

——— husbandry in the south. *See* **Randall,** Henry S.

——— raising. Wartung, Pflege und Zucht der Schafe. *See* **Petri,** Bernhard.

——— Report on. By J. R. Dodge. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1876. v. 1.**

——— shearing. Scheeren unserer Hausthiere. *See* **Rueff,** A.

——— Über die Blattern der Schafe. *See* **Heintl,** Franz Ritter v.

SHEFFIELD, Key to the manufactories of. *See* **Smith,** Joseph.

Sheldrake, T. A description of the theory and properties of inclined plane wheels. 8°. *London,* 1811.

Shelley, C. P. B. Workshop appliances; descriptions of the ganging and measuring instruments, hand-cutting tools, lathes, drilling, planing, and other machine tools used by engineers. 12°. *New York,* 1873.

Shelley, Mary Wollstonecraft Godwin. Lives of the most eminent literary and scientific men of France. 2 v. 16°. *London,* 1836-39. **Lardner's cabinet cyclopædia, v. 91, 92.**

——— **Brewster,** David, **Montgomery,** J., and others. Lives of the most eminent literary and scientific men of Italy, Spain and Portugal. 3 v. 16°

Digitized by Google

Shelley, M. W. G., and others—Continued. *London,* 1835–37. **Lardner's cabinet cyclopædia, v. 88–90.**

SHELLS and shell guns. *See* **Dahlgren,** J. A.

——— The Shrapnel shell in England and Belgium. *See* **Bormann,** *Maj. Gen.*

SHELLS, Collecting North American. **Smiths'n misc. coll., v. 2.**

——— List of North American. By J. Lea and others. **Smiths'n misc. coll., v. 2.**

Shelton, William V. The mechanic's guide; a handbook for the use of engineers, mechanics, etc. 12°. *London,* 1875.

SHEPHERDS and owners of flocks, Advice to. *See* **Daubenton,** M.

——— Praktisches Lehrbuch für Schäfer, etc. *See* **Fritz,** P.

Sheridan, Philip H., Expedition up the Yellowstone, under orders of. *See* UNITED STATES, **War department.**

Sheridan, Thomas. A complete dictionary of the English language, with regard to sound and meaning. 2 v. 8°. *London,* 1797.

Sherwood, Henry Hall. The motive power of organic life, and magnetic phenomena of terrestrial and planetary motions, with the application of magnetism to the nature, symptoms and treatment of chronic diseases. 8°. *New York,* 1841.

Shew, Joel. Facts in hydropathy, or water-cure; a collection of treatment showing the safest and most effectual means to be used in gout, rheumatism, indigestion, etc.; to which is added, Bulwer's celebrated letter. 12°. *Cooperstown, N. Y.,* 1847.

——— The water-cure manual; descriptions of the modes of bathing, the hygienic and curative effects of air, exercise, clothing, occupation, diet, water-drinking, etc. 12°. *New York,* 1847.

SHIP armor. Armament of our ships. Record of United States naval institute. *See* UNITED STATES. **Navy dept. Ordnance papers.**

——— building. **Abridgments English Patents, No. 21.**

——— ——— Anleitung zur Schiffbau-Kunst. *See* **Mielichhofer,** Carl.

——— ——— Directions for laying off ships on the mould loft floors. *See* **Fincham,** J.

SHIP armor, Mechanical engineering and. *See* **Smith,** William, **Noble,** John Henry, and **Smith,** Thomas.

——— ——— Modern system of naval architecture. *See* **Russell,** J. Scott.

——— ——— Outline of. *See* **Fincham,** John.

——— ——— Theory and practice of. *See* **Murray,** A.

——— canal across the isthmus of America. *See* **Pitman,** Robert Birks.

SHIP (The), its origin, progress and history. *See* **Steinitz,** Francis.

SHIPMASTER'S assistant, and commercial digest. *See* **Blunt,** Joseph.

SHIPPING, The law of, and merchants and shipmasters' guide. *See* **Dixon,** Francis B.

SHIPS, Iron-cased. *See* **Halsted,** E. P.

SHOEBURYNESS and the guns. *See* **Barry,** P.

SHOEMAKERS, Lives of distinguished. *See* **Lives.**

SHOEMAKING. Art du cordonnier. Par F. A. P. de Garsault. PARIS. **Acad. roy. des. sc.; arts et métiers, v. 32 and 3.**

——— *See* PHILADELPHIA. **Internat. exhib. 1876, Group 12.**

SHOES. Best form of the shoe, by Camper. *See* **Dowie,** J.

——— Boot and shoe manufacturer's assistant. *See* **Richardson,** W. H., *jr.*

——— Schuhwaaren. Von S. Goldschmidt. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

SHOOTING. *See, also,* **Sports.**

Shooting; containing the various methods of forging, boring and dressing gun barrels, practised in France, Spain and England, and the different proofs of barrels employed in these countries. 2d ed. 8°. *London,* 1791. [†]

——— Instructions relating to. *See* **Hawker,** P.

SHORTHAND. *See* **Phonography.**

SHOT-GUN (The) and sporting rifle; and the dogs, ponies, ferrets, etc., used with them in the various kinds of shooting and trapping. *See* **Walsh,** John H.

Shreve, S. H. Spangenburg's fatigue of metals; preface by. *See* **Spangenburg,** Ludwig. **Van Nostrand's science series, No. 3.**

Shute, Samuel M. A manual of Anglo-Saxon for beginners; comprising gram-

Digitized by Google

Shute, Samuel M.—Continued.
mar, reader and glossary. 12°. *New York*, 1867.

Shultz, Benjamin. An inaugural botanico-medical dissertation on the Phytolacca decandra of Linnæus. 8°. *Philadelphia*, 1795.

Siber, Thaddäus, Denkrede auf. *See* **Lamont,** J.

SICILY. Reale istituto d'incoraggiamento di agricoltura in Sicilia. Giornale. 3a serie. Anno I. Tomo 1. 8°. *Palermo*, 1863.

——— La Sicilia all'esposizione universale agraria di Parigi. 8°. *n. t. p.*

Sickel, C. A. Die Grubenzimmerung. 1. Abth. 8°. *Freiberg*, 1872.

Sickels, Frederick Elsworth. Statement of facts in relation to Frederick E. Sickels' cut off. 8°. *New York*, 1844. pp. 40.

SICKNESS and mortality of the army during the first year of the war. *See* UNITED STATES. **War dept. Surgeon general's office. Circular 15.**

Siddons, G. A. Rathgeber für alle diejenigen Künstler und Professionisten, welche ihren Arbeiten aus Holz, Metall, etc. durch Schleifen etc. die höchste Schönheit und Vollendung zu verleihen streben, oder ein aus langjähriger Erfahrung geschöpftes Rezeptbuch fur Ebenisten u. s. w. Aus dem Englischen bearbeitet, von C. H. Schmidt. *Illus.* 2te Aufl. 8°. *Weimar*, 1842. **82 Neuer Schauplatz der Künste.**

Siebold, Carl Theodor Ernst von. Ueber Parthenogenesis. Vortrag. 4°. *München*, 1862. pp. 25.

——— Anatomy of the invertebrata; transl. from the German. Ed. with notes, recording the recent progress of the science, by Waldo J. Burnett. 8°. *Boston*, 1854.

Siebold, Philip Fr. von. Nippon. Archiv zur Beschreibung von Japan und dessen Neben- und Schutzländern: Jezo mit den südlichen Kurilen, Krafts, Kooraï und den Liukiu Inseln, nach japanischen und europäischen Schriften und eigenen Beobachtungen bearbeitet von. *Illus.* Imp. 4°. *Leyden*, 1832.

——— Same. [Plates without text, 7 Abtheilungen, bound in 8 v.] fol. *Leyden*, 1852.

Siemens, C. William. Brennstoff. Ueber Gewinnung von Eisen und Stahl durch

Siemens, C. William—Continued.
direktes Verfahren. Vorträge. 8°. *Berlin*, 1874.

——— Fuel; to which is added, the value of artificial fuels, as compared with coal, by John Wormald. 18°. *New York*, 1874. **Van Nostrand's science series, No. 9.**

Siemens, C., and **Grothe,** H. Die Zuckerfabrikation. Theoretisch und praktisch dargestellt. 2te Aufl. sm. 4°. *Braunschweig*, 1871.

Siemens, Karl. Neuerungen in der Brennerei, Brauerei und Stärkefabrikation. 8°. *Braunschweig*, 1870.

SIEVE making. Art du criblier. Par Fougeroux d'Angerville. PARIS. **Acad. roy. des sc.; arts et métiers, v. 33 and v. 14.**

——— ——— Die Siebmacherei. *See* **Schmied,** C. **77 Neuer Schauplatz der Künste.**

SIGHT, near, and aged, and impaired vision. *See* **Cooper,** William White.

Siglarium Romanum. *See* **Gerrard,** John.

Sigmond, George B. Polytechnic review and magazine; ed. by. *See* **Polytechnic.**

SIGN-writing. The grainer, marbler and sign-writer's assistant. *See* **Sutherland,** W.

SIGNAL book, American semaphoric. *See* Rogers and Black.

——— ——— Rogers' life-saving. *See* **Rogers,** Henry J.

SIGNALS, American code of. *See* **Rogers,** H. J.

——— The brachial telegraph. *See* **Jenks,** R. W.

——— Code of. *See* **Marryat,** Frederick.

——— Code of. *See* **Walker,** B. J.

——— Code Reynold. Télégraphie nautique, polyglotte, internationale. *See* **Reynold-Chauvancy,** C de.

——— Dictionary of. *See* **Hardley-Wilmot,** A. P.

——— An essay on different methods of communication by. *See* **Gamble,** J.

——— A manual of. *See* **Myer,** Albert J.

——— Railway. **Abridgments, English Patents, No. 38.**

——— Seaman's signal book. *See* **Rogers,** H. J.

——— Das Telegraphen- und Signalwesen der Eisenbahnen. *See* **Weber,** M. M. von.

Digitized by Google

Sikes' hydrometer, Action of. *See* **Keene,** J. B.

Silbermann, J. T. Reports on the standard weights, measures and coins exchanged between France and the United States. *See* **Vattemare,** Alexander.

Silcox, George W. Report on the art of printing, and on manufactures of paper. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

Silicate of soda applied to soap; published by Philadelphia quartz co. *Philadelphia,* 1869. pp. 35.

SILK and silk manufactures, Report on. By E. C. Cowdin. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 6.**

Silk association of America. 1st, 3d, and 5th annual reports, 1873, 1875, 1877. [The first is entitled: 'First annual meeting of the silk association.' The third contains preamble and by-laws in force May, 1875, and catalogue of members and subscribers.] 8°. *New York,* 1873-77——.

—— Bericht über die Thätigkeit des Kärntnerischen Seidenbau-Vereines. *See* KLAGENFURT.

—— fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 9.**

—— La filature; ou l'art de tirer la soie des cocons. *See* **Société** séricicole.

—— from spiders. *See* **Termeyer,** Raymond Maria de.

—— Das Ganze des Seidenbaues. *See* **Haumann,** G. H. **44 Neuer-Schauplatz der Künste.**

—— growers' manual, California. *See* **Prevost,** Louis.

—— History of. *See* **History.**

—— Impression des étoffes de soie. *See* **Kæppelin,** D. Fabrication des tissus imprimés.

—— industry in America. *See* **Brockett,** L. P.

—— manufacture. Art du fabriquant d'étoffes de soie. Par J. Paulet. PARIS. **Acad. roy. des sc.; arts et métiers, v. 23 and 28; also v. 9 and 15.**

—— —— Handbuch des Seidenmanufacturwesens. *See* **Practisches. 116 Neuer Schauplatz der Künste.**

—— —— Treatise on the origin, progressive improvement, and present state of. *See* **Porter,** G. R.

SILK. Produits d'un voyage en Chine. *See* **Hedde,** Isidore.

—— Seide und Seidenwaaren. Von Anton Harpske. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

SILKWORMS. L'art d'élever et de soigner les vers à soie. Par M. Morin. *See* **Radouan,** J. **90 Manuels Roret.**

—— The art of rearing. *See* **Dandolo,** *Count.*

—— Éducation des vers à soie. *See* **Rédarès,** J. M. M. **Encyclopédie populaire, v. 20.**

Sillig, Julius. Dictionary of the artists of antiquity; architects, carvers, engravers, modellers, painters, sculptors, statuaries, and workers in bronze, gold, ivory, and silver. Transl. from the Latin, by H. W. Williams. 8°. *London,* 1836.

Silliman, Benjamin, *sen.* American journal of science. *See* **American.**

—— Manual on the cultivation of the sugar cane, and the fabrication and refinement of sugar. 8°. *Washington,* 1833.

—— Life of. *See* **Fisher,** George P.

Silliman, Benjamin, *jr.* First principles of chemistry. *Illus.* 48th ed. 8°. *Philadelphia,* 1860.

Silloway, Thomas W. Text-book of modern carpentry; comprising a treatise on building-timber, with rules and tables for calculating its strength, and the strains to which each timber of the structure is subjected. 16°. *Boston,* 1856.

Silsby, Race, Downs, Henison, and Mynderse, appellants, vs. Elisha Foote. Appeal from the U. S. circuit court for the northern district of New York. 8°. *Washington,* 1857.

SILURIA. The oldest fossiliferous rocks and their foundations. *See* **Murchison,** Roderick Impey.

SILURIAN age. Das Christiania-Silurbecken. *See* **Kjerulf,** Theodor.

Silva; or a discourse of forest trees. *See* **Evelyn,** John.

Silver, George. A practical treatise on the prevention and cure of smoky chimneys. 12°. *Glasgow,* 1835.

SILVER and lead, The metallurgy of. *See* **Lamborn,** Robert H. **Weale's series No. 134.**

—— Art of assaying. *See* **Watherston,** J. N.

Digitized by Google

SILVER, History of ancient and modern, pub. by Bailey and co. 24°. *Philadelphia*. 1871. [†]

——— Méthode d'affiner l'argent. PARIS. **Acad. roy. des sc.; arts et métiers, v. 15.**

——— Mining in Colorado. *See* **Whitney**, J. P.

——— ware. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 11.**

SILVERING. *See, also*, **Galvanoplasty.**

——— Die Kunst des Vergoldens, Versilberns, etc. *See* **Schmidt**, Christian Heinrich. **133 Neuer Schauplatz der Künste.**

Silversmith, Julius. A practical hand book for miners, metallurgists, and assayers. Also a digest of mining laws. 4th ed. 12°. *New York*, 1867.

SILVERSMITH. Designs for silversmiths. *See* **Pugin**, A. W.

——— Kunst des Goldarbeiters, Silberarbeiters und Juweliers. *See* **Kulmer**, Rudolf v. **8 Neuer Schauplatz der Künste.**

Simler, R Theodor. Die Löthrohr-Chemie, in Verbindung mit Reactionen auf nassem Wege. 8°. *Zürich*, 1873.

Simmonds, Peter Lund. Cotton manufacture of Great Britain; supplement by. *See* **Ure**, A.

——— A dictionary of trade products; commercial, manufacturing, and technical terms, moneys, weights, and measures of all countries reduced to the British standard. 8°. *London*, 1858.

——— Philosophy of manufactures; ed. by. *See* **Ure**, A.

——— The technologist; ed by. *See* **Technologist.**

——— Waste products and undeveloped substances; or hints for enterprise in neglected fields. 8°. *London*, 1862.

Simmons, Amelia. American cookery; or the art of dressing viands, fish, poultry, and vegetables, and the best mode of making puff-pastes, pies, tarts, puddings, custards, and preserves; and all kinds of cakes. 3d ed. 24°. *Salem, N. Y.*, 1804.

Simms, Frederick Walter. Practical tunnelling, as exemplified by the Blechingley and Saltwood tunnels. 4°. *London*, 1844.

——— On setting out railways, canals, etc. **Weale's papers on engineering, v. 1.**

——— A treatise on the principles and practice of levelling; showing its application to purposes of civil engineering, particularly to the construction of roads. 2d ed. 8°. *London*, 1843.

——— A treatise on the principal mathematical and drawing instruments employed in surveying, levelling, and astronomy; explaining their construction, adjustment and use; with appendix and tables. *Illus.* 2d ed. 8°. *London*, 1836. Also, 6th ed., 1844.

——— Same. With description of the theodolite, together with instructions in field work. *Illus.* 3d ed. 1847.

Simms, William. The achromatic telescope, and its various mountings, especially the equatorial; with hints on private observatories. 8°. *London*, 1852.

Simon, Heinrich. Kohlen-Haue-, Fräs- oder Schrämm-Maschinen und Kohlenbrecher. Separatabdruck aus der Zeitschrift des berg- und hüttenmännischen Vereines für Kärnten, 1874. 8°. *Klagenfurt*, 1874.

Simon, J. Franz. Animal chemistry, with reference to the physiology and pathology of man. Transl. from the German by G. E. Day. 2 v. 8°. *London*, 1845–46.

Simonde de Sismondi, Jean Charles Leonhard. A history of the fall of the Roman empire, with a view of the invasion and settlement of the barbarians. 2 v. 16°. *London*, 1834. **Lardner's cabinet cyclopædia, v. 44, 45.**

——— Italian republics. 16°. *London*, [1835]. **Lardner's cabinet cyclopædia, v. 47.**

Simonds, William Edgar. The law of design patents; containing all reported decisions of the United States courts and the patent office in design cases to 1874, with digests and treatise. 8°. *New York*, 1874. [†]

Simpson, Edward. A treatise on ordnance and naval gunnery, arranged as a text-book for the United States naval academy. 2d ed. 8°. *New York*, 1862.

Simpson, G. Wharton. On the production of photographs in pigments; with notes on carbon printing and Swan's process. 8°. *London*, 1867.

——— Photographic news; ed. by. *See* **Photographic news.**

——— Photographic news almanac. *See* **Photographic.**

Digitized by Google

Simpson, G. Wharton. The silver sunbeam. *See* **Towler,** J.

Simpson, J. H. Report of explorations across the Great Basin of the territory of Utah, for a direct wagon route from Camp Floyd to Genoa, in Carson Valley, 1859. 4°. *Washington,* 1876. UNITED STATES. **War** dept. Bureau of engineers.

Simpson, Joseph Cairn. Horse portraiture; breeding, rearing and training trotters, with their management in the stable and on the track, and preparation for races. Histories of the horse and horsemen; with appendix, containing the performances of Dexter. *Illus.* 12°. *New York,* 1868.

Simpson, Thomas. Miscellaneous tracts on some curious and very interesting subjects in mechanics, physical astronomy, and speculative mathematics. sm. 4°. *London,* 1757.

——— Traité de trigonométrie, rectiligne et sphérique; trad. de l'anglais de. 8°. *Paris,* 1771.

Sims, J. Marion. Clinical notes on uterine surgery, with management of the sterile condition. 8°. *New York,* 1869.

Simson, Robert. Elements of the conic sections; the first three books, transl. from the Latin original. 8°. *Edinburgh,* 1775.

Sinclair, George. Hortus Gramineus Woburnensis, or an account of experiments on the produce and nutritive qualities of different grasses and other plants used as the food of the more valuable domestic animals. Illustrated with figures of the plants and seeds, and practical observations on their natural habits. 8°. *London,* 1824.

Sinclair, Hugh. The whole process of marbling and staining paper and book-edges. 18°. *London,* 1820.

Sinclair, *Sir* John. The code of health and longevity; the principles calculated for the preservation of health and attainment of long life. 4 v. 8°. *Edinburgh,* 1806–07.

Sinclair, Robert, jr., and co. Price current of agricultural machinery. 8°. *Baltimore,* 1850.

Singer, Isaac M. Report in the matter of application of W. Wickersham, on interference with the patents granted. *See* **Little,** A. B., *and* **Lawrence,** D. W. C.

Singer and co. Sewing by machinery; exposition of the rights of patentees and of the public. 8°. *New York,* 1853.

Single, Christian. Abbildungen der Traubensorten Württembergs. 4°. *Stuttgart,* 1860.

Sinnett, A. Percy. Patent rights; an inquiry into their nature. 8°. *London,* 1862. pp. 40.

Sismondi, J. C. L. Simonde de. *See* **Simonde de Sismondi,** J. C. L.

Sinsabaugh, L. W., and **Tipton,** T. C Digest of cotton bale-ties of United States patents, to Jan. 1st, 1877; and English patents, to Jan. 1st, 1876. *Illus.* 4°. *Washington,* 1877.

SKATER'S manual, The. *See* **Gill,** Edward L.

SKELETON leaves, Art of producing. *See* **Phantom** flowers.

——— Structure of the skeleton and teeth. By R Owen. *See* **Bushnan,** J. S., and others. **Orr's circle of the sciences, v. 1.**

SKELETONS, List of, in the United States army museum, for use during the exhibition of 1876. *See* UNITED STATES. **War dept. Surgeon general's office.**

SKERRYVORE lighthouse, Account of the. *See* **Stevenson,** A.

SKETCH book of the war. *See* **Gardner's.**

Sketcher, The. *See* **Eagles,** John.

Sketcher's manual, The. *See* **Howard,** Frank.

SKEW arches. Method of construction. *See* **Hyde,** E. W. **Van Nostrand's science series, No. 15.**

——— bridges. Der Bau der schiefen Brücke über den Sanufluss bei Steinbruck, etc. *See* **Heider,** Eduard v.

SKIN, Diseases of the. *See* **Jahr,** G. H. G.

——— A practical treatise on the. *See* **Wilson,** Erasmus.

——— Structural lesions of. *See* **Damon,** Howard F.

Skinner, F. G. Remarks on roads. *See* **Kingsford,** W.

Skinner, I L. The American journal of improvements in the useful arts, and mirror of the patent office in the United States. 1 v. 8°. *Washington,* 1828. [†]

Skinner, John Stuart. American farmer; ed. by. *See* **American** farmer.

Digitized by Google

Skinner, John Stuart, and **Finch,** Myron. The plough, the loom and the anvil. v. 4. 8°. *New York*, 1852.

SKINS. Abridgments English Patents, No. 55.

SKULLS. List of skeletons and crania, United States army medical museum, for use during the exhibition, 1876. *See* UNITED STATES. **War** dept. Surgeon general's office.

Slagg, Charles. Sanitary work in the smaller towns and villages. Part 1st. Some of the more common forms of nuisance and their remedies. Part 2d. Drainage. Part 3d. Water supply. 8°. *London*, 1876.

SLANG dictionary, The. *See* **H**, J. C. [†]

SLATE and clay. Die technische Verwerthung Schwefelkies führender Schiefer, etc. *See* **Seger,** August Hermann.

——— Art de tirer des carrières la pierre d'ardoise. Par A. L. Fougeroux de Bondaroy. PARIS. **Acad. roy. des sc.; arts et mètiers, v. 14; also v. 4.**

Slater, Samuel, Memoir of. *See* **White,** G. S.

Sleeman, Thomas. A practical treatise on the use of portable mathematical instruments. 8°. *London*, 1805.

SLEEP and its derangements. *See* **Hammond,** W. A.

——— On wakefulness and physiology of. *See* **Hammond,** William A.

SLIDE-rule. *See* **Hoare,** Charles.

——— ——— instructor. *See* **Patten,** William.

——— ——— Instrumental calculation, or a treatise on the. *See* **McLeod,** T. H.

——— ——— The slide-ruler's guide. *See* **Lucas,** George O.

——— ——— Utility of the. *See* **Jillson,** Arnold.

Slight, James. General list of machinery and implements, 1848. 8°. pp. 15. *n. t. p.*

——— and **Burn,** Robert Scott. Book of farm implements and machinery. Ed. by Henry Stephens. 8°. *Edinburgh*, 1853.

Sloan, Samuel. Constructive architecture. Designs for domes, roofs, spires: for bays, window shutters, sliding doors: examples of five orders of architecture, geometrical problems and glossary. 4°. *Philadelphia*, 1859.

——— Homestead architecture. Designs for villas, cottages and farm houses; essays on style, construction, landscape gardening, furniture. 8°. *Philadelphia*, 1861. 2d ed., 1867.

——— The model architect. Designs for cottages, villas, suburban residences, with explanations, specifications, estimate and details. 2 v. fol. *Philadelphia*, 1852. [2 copies]

Sloat, George B. Decisions in the sewing machine cases of Potter and Wheeler vs. Sloat and others, etc. *See* **Nelson,** S., and **Smalley,** D. A.

——— Report of the case of Sloat vs. Spring et al. *See* **Harding,** G.

SLOTH. Memoir on the extinct sloth tribe of North America. By J. Leidy. **Smiths'n contrib., v. 7.**

Slugg, J. T. Observational astronomy, with use of the telescope and list of double stars and nebulæ; by a clergyman. Ed. by. 8°. *London*, 1862. [†]

SMALL arms, Report from the select committee on. *See* GREAT BRITAIN.

——— ——— Reports of experiments with. *See* UNITED STATES. **War** dept. Ordnance bureau.

Small fruit culturist, The. *See* **Fuller,** Andrew S.

Smalley, David A. Decisions on sewing machine cases. *See* **Nelson,** S.

Smeaton, John. Experimental enquiry concerning the natural powers of wind and water to turn mills and other machines depending on a circular motion; an experimental examination of the quantity and proportion of mechanic power necessary to be employed in giving different degrees of velocity to heavy bodies from a state of rest; also experiments upon the collision of bodies. *Illus.* 8°. *London*, 1794.

——— Miscellaneous papers; comprising his communications to the Royal society, printed in the Philosophical transactions; forming a fourth volume to his reports. *Illus.* 4°. *London*, 1814. [Bound with third volume of the reports.]

——— A narrative of the building and a description of the construction of the Edystone lighthouse, with stone: to which is subjoined, an appendix, giving some account of the lighthouse on the Spurn

Digitized by Google

Smeaton, John—Continued.
point, built upon a sand. 2d ed. fol. *London*, 1813.
——— Reports of the late John Smeaton. 3 v. 4°. *London*, 1812.
Smeaton and lighthouses; a popular biography; with an historical introduction and sequel. 24°. *London*, 1844.
——— Life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 2.**
Smedley, John. Practical hydropathy; with remarks on baths, diet, clothing and habits of life. 8th ed. 12°. *London*, 1866.
Smee, Alfred. Elements of electro-metallurgy. *Illus.* 2d ed. 8°. *London*, 1843.
SMELTING. *See, also,* **Metallurgy.**
——— Handbuch der metallurgischen Hüttenkunde. *See* **Kerl,** Bruno.
——— Hütten- und Eisenhüttenwesen Nord-Amerikas. Franz Kupelwieser. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 4.**
——— Hüttenwesen. Von Franz Kupelwieser. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**
——— Idioticon der österreichischen Berg- und Hüttensprache. *See* **Scheuchenstuel,** C. von.
——— terms used in French, Spanish, and German. *See* **English** and foreign mining glossary.
——— Vorlesungen über allgemeine Hüttenkunde. *See* **Plattner,** Carl Friedrich.
Smiles, Samuel. Industrial biography; iron workers and tool-makers. 12°. *Boston*, 1864.
——— Lives of the engineers; an account of their principal works, comprising a history of inland communication in Britain. *Illus.* 3 v. *London*, 1861-62.
——— Lives of the engineers; new and revised ed. *Illus.* 5 v. *London*, 1874.

CONTENTS.

v. 1. Embankments and canals: Cornelius Vermuyden, Hugh Myddleton, John Perry, James Brindley.
v. 2. Harbors, lighthouses, and bridges: John Smeaton and John Rennie.
v. 3. History of roads: John Metcalfe and Thomas Telford.
v. 4. The steam engine: Matthew Boulton and James Watt.
v. 5. The locomotive: George and Robert Stephenson.

——— The story of the life of George Stephenson, railway engineer, abridged by the author from the original and larger work. 18°. *London*, 1862.
Smiles' life of Stephenson, Review of. *See* **Nedley,** O. D.
Smith, Adam. An inquiry into the nature and causes of the wealth of nations; with a life of the author, an introductory discourse, notes and supplemental dissertations, by J. R. McCulloch. 4 v. 8°. *Edinburgh*, 1828.
Smith, Aquilla. The blowpipe vade mecum. The blowpipe character of minerals, deduced from original observations; alphabetically arranged and edited, by Samuel Haughton and Robert H. Scott. 8°. *London*, 1862.
Smith, Archibald. Journal of a voyage to Australia and around the world for magnetical research; ed. by. *See* **Scoresby,** W.
Smith, Augustus W. An elementary treatise on mechanics; embracing the theory of statics and dynamics, and its application to solids and fluids. 8°. *New York*, 1849.
Smith, C. J. Common words with curious derivations. 12°. *London*, 1865.
Smith, Charles H. Lithology, or observations on stones used for building; treating chiefly of the magnesian limestones of Yorkshire, Derbyshire and Nottinghamshire, with reference to the selection of stone for building the exterior of the new houses of parliament. 4°. [*London*, 1845.] pp. 36. *n. t. p.*
Smith, Charles Hamilton. The natural history of the human species; its typical forms, primeval distribution, filiations, and migrations; with an abstract of the views of Blumenbach, Prichard, Bachman, Agassiz, and other authors of repute on the subject. 12°. *Boston*, 1851.
Smith, David. The dyer's instructor; containing nearly eight hundred receipts; to which is added a treatise on the art of padding; the printing of silk warps, skeins and handkerchiefs, and the various mordants and colors for different styles of such work. 12°. *Philadelphia*, 1853. 2d ed., 1860.
——— Die englische Färberei. In's Deutsche übertragen von C. H. Schmidt. 8°. *Weimar*, 1852. **193 Neuer Schauplatz der Künste.**

Digitized by Google

Smith, Edmond Reuel. The Araucanians, or a tour among the Indian tribes of Southern Chili. 12°. *New York*, 1855.

Smith, Edward. Foods. 12°. *New York*, 1874. **International scientific series, v. 3.**

—— and **Dallas,** W. S. A system of natural history: a structural and classified arrangement of plants and animals. v. 1. Botany and invertebrated animals. v. 2. Vertebrated animals. 8°. *London*, 1855. **Orr's circle of sciences, v. 2, 3.**

Smith, G. The laboratory; or, school of arts; a collection of secrets, experiments and manual operations in arts and manufactures; a complete treatise on fire-works, and the art of short-hand writing. *Illus.* 6th ed. 2 v. *London*, 1799.

Smith, Gideon B. American farmer; ed. by. *See* **American farmer.**

Smith, Henry H. Minor surgery; or hints on the every-day duties of the surgeon. 3d ed. 8°. *Philadelphia*, 1850.

—— Syllabus of the lectures on the principles and practice of surgery. roy. 8°. *Philadelphia*, 1855.

—— A system of operative surgery, based upon the practice of surgeons in the United States, with a bibliographical index, and historical record of many of their operations during two hundred and thirty-four years. 2 v. 8°. *Philadelphia*, 1855.

Smith, J. Augustine. The different races of men, Lecture on. *See* **Lyell,** Charles. Lectures on geology.

Smith, J. C. Ready reckoner, or key to mental calculations. 24°. *Cincinnati*, 1853. pp. 33.

—— and **Jenkins,** F. W. The national accountant; a treatise on the theory and practice of book-keeping, by double and single entry. 3 parts. roy. 8°. *Pittsburgh*, 1865.

Smith, J. Lawrence. Report on chemicals. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

—— Report on industrial chemistry. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 2.**

Smith, J. Lewis. A treatise on the diseases of infancy and childhood. 8°. *Philadelphia*, 1869.

Smith, J. V. C. Boston medical and surgical journal; ed. by. v. 40–51, 1849–55. 8°. *Boston*, 1849–55. [†]

Smith, James. The mechanic. Compendium of practical inventions; with analytical index. *Illus.* 2 v. 8°. *London*, 1825. [†]

—— A panorama of science and art; embracing the sciences of aerostation, agriculture and gardening, architecture, astronomy, chemistry, electricity, galvanism, hydrostatics, hydraulics, magnetism, mechanics, optics, etc. The art of building, brewing, bleaching, clock-work, distillation, dyeing, drawing, engraving, gilding and silvering. 2 v. 8°. *Liverpool*, 1813.

Smith, James. A specimen of ancient carpentry, consisting of designs for roofs; exemplify'd in common, circular, mixt, spiral, and such which have been fram'd in public and private antique buildings; to which is added mouldings for cornices, door and window jambs. fol. *London*, 1787.

Smith, John. Ferns, British and foreign; their history, organography, classification, and enumeration; with a treatise on their cultivation, etc. 12°. *London*, 1866.

Smith, John. Curiosities of common water; rules for preserving health, by a proper course of diet. From the 5th London edition, with additions, by Joel Shew. 12°. *New York*, 1853.

—— Fruits and farinacea, the proper food of man; an attempt to prove from history, anatomy, physiology, and chemistry, that the original, natural and best diet of man, is derived from the vegetable kingdom. Notes and illustrations, by R. T. Trall. From 2d London edition. 12°. *New York*, 1854.

Smith, John Calvin. Gazetteer of the United States. *See* **Haskel,** D.

—— Harper's statistical gazetteer of the world. Illustrated by maps. 8°. *New York*, 1855.

Smith, John Jay. Designs for cottages, villas, etc., by. *See* **Walter,** T. U.

—— Guide to workers in metals and stone, from designs and selections *See* **Walter,** T. U.

—— Horticulturist; ed. by. *See* **Horticulturist.**

Digitized by Google

Smith, John T. Treatise on mortars and cements; transl. by. *See* **Vicat,** L. J.

Smith, John William. An epitome of the law relating to patents for inventions as altered by statute 5 and 6, W. 4, c. 83; with an appendix of statutes, forms, etc. 12°. *London,* 1836.

Smith, Joseph. Explanation or key to the various manufactories of Sheffield. *Illus.* 4°. *Sheffield,* 1816.

Smith, Junius. Essays on the cultivation of the tea plant in the United States. 8°. *New York,* 1848.

Smith, Mary Howe. Lessons on the globe; illustrated by Perce's magnetic globe and magnetic objects. 8°. *New York,* 1866.

Smith, N. R. Treatment of fractures of the lower extremity by use of anterior, suspensory apparatus. 8°. *Baltimore,* 1867.

Smith, Nathan D. Meteorological observations near Washington, Ark., 1840–59. **Smiths'n contrib., v. 12.**

Smith, R. N. Illustrated guide to and through Laurel Hill cemetery. With a glance at celebrated tombs, an essay on monumental architecture and a tour up the Schuylkill. 8°. *Philadelphia,* 1852.

Smith, R. Murdoch. Persian art. *Illus.* 12°. *London,* 1876. **South Kensington art and science handbooks, No. 7.**

Smith, R. S. A manual of linear perspective, of form, shade, shadow, and reflection. 8°. *New York,* 1857.

—— A manual of topographical drawing. 8°. *New York,* 1854.

Smith, Raynes W. Treatise on the cultivation of the sugar cane; by. *See* **Eight** practical treatises.

Smith, Robert. A compleat system of opticks, in four books; viz: a popular, a mathematical, a mechanical, and a philosophical treatise; to which are added remarks upon the whole. 2 v. 4°. *Cambridge,* 1738.

Smith, Seth. Description of the patent metallic lining and damper for the chimneys of dwellings, and other houses and buildings; invented by. 8°. *London.* pp. 16.

Smith, Stephen. Hand book of surgical operations. 5th ed. 16°. *New York,* 1863.

Smith, Thomas. Progress of civil and mechanical engineering. *See* **Smith,** William, **Noble,** John Henry, and **Smith,** Thomas.

Smith, Thomas L. Elements of the laws. Outlines of the system of civil and criminal laws in force in the several States and in the United States. 8°. *Philadephia,* 1853.

Smith, Thomas Southward. Animal physiology; published for the diffusion of useful knowledge. 8°. *London. n. t. p.* [Bound in a vol. entitled 'Tracts'.]

Smith, Truman. An inquiry into the origin of modern anæsthesia. 8°. *Hartford,* 1867.

Smith, William. Annual statement of the trade and commerce of Cincinnati, for 1858. Reported to the chamber of commerce. 8°. *Cincinnati,* 1858. pp. 34.

Smith, William. Dictionary of Greek and Roman antiquities. 8°. *Boston,* 1854.

—— Dictionary of Greek and Roman biography and mythology; ed. by. 3 v. *London,* 1844–64.

—— A history of Greece from the earliest times to the Roman conquest; with notes and continuation to the present time, by C. C. Felton. roy. 8°. *Boston,* 1855.

Smith, William [of Woolston]. A letter on steam cultivation; containing an account of the experiments and practice of the author, with some reasons for the same. 8°. *London,* 1857. pp. 22.

Smith, William, **Noble,** John Henry, and **Smith,** Thomas. The progress of civil and mechanical engineering and shipbuilding illustrated, being a series of selected examples of construction in marine, locomotive and stationary engines, iron ships and other vessels, machine tools, ordnance, and other mechanical subjects; ed. by: aided and assisted by numerous eminent engineers and well known contributors to practical science. Div. 1. 4°. *London,* 1877.

Smith, William R. The history of Wisconsin. 3 parts. Historical, documentary and descriptive. 8°. *Madison,* 1854.

Smith, Worthington G. Mushrooms and toadstools, the difference between edible and poisonous fungi. *Illus.* 18°. *London,* 1867.

Smith and Swinney. The house-keeper's guide and everybody's hand-book, with

Digitized by Google

Smith and **Swinney**—Continued.
500 recipes. 3d ed. *Cincinnati, Ohio*, 1865. Another, 1870.

SMITH and founder's director. *See* **Cottingham**, L. N.

Smithsonian institution (Washington, D. C.), An account of the; its founder, builder, building, apparatus, etc. *See* **Rhees**, W. J.

——— ——— Annual reports of the board of regents. [Beginning with third report. 3d to 10th are called 'Annual report', with the ordinal number; those following, simply, 'Report', with the year.] 1848–76. 8°. *Washington*, 1849–77——.

——— ——— First report of the secretary to the board of regents; giving a programme of organization, and an account of the operations during the year. Presented Dec. 8, 1847. 8°. *Washington*, 1848. pp. 48.

——— ——— Powell's exploration of the Colorado; under direction of the secretary of. *See* **Powell**, John W.

——— ——— Reports, etc.; exhibiting its plans, operations and financial condition up to Jan. 1, 1849. From the 3d annual report of the board of regents; presented to congress Feb. 19, 1849. 8°. *Washington*, 1849.

——— ——— Smithsonian contributions to knowledge. v. 1–21. 1848–76——.

CONTENTS.

Vol. i. Advertisement. Ancient monuments of the Mississippi valley, comprising the results of extensive original surveys and explorations. By E. G. Squier and E. H. Davis.

Vol. ii. 1. Researches relative to the planet Neptune. By S. C. Walker.
2. On the vocal sounds of Laura Bridgeman, the blind deaf mute. By F. Lieber.
3. Microscopical examination of soundings, made by the United States coast survey off the Atlantic coast of the United States. By J. W. Bailey.
4. Contributions to the physical geography of the United States. By E. Ellet.
5. Mosasaurus and three allied new genera. By R. W. Gibbes.
6. The classification of insects from embryological data. By L. Agassiz.
7. On the explosiveness of nitre. By Robert Hare.
8. Microscopical observations made in South Carolina, Georgia and Florida. By J. W. Bailey.
9. Aboriginal monuments of the State of New York. By E. G. Squier.

Appendix. Ephemeris of the planet Neptune, 1846–51. By S. C. Walker.

Occultations visible in the United States during 1851. Computed by J. Downes.

Smithsonian institution—Continued.

Vol. iii. 1. Observations on terrestrial magnetism. By J. Locke.
2. Researches on electrical rheometry. By A. Secchi.
3. Contributions to the natural history of the fresh-water fishes of North America. By C. Girard.
4. Nereis Boreali-Americana; or, contributions to a history of the marine algæ of North America. Pt. i. By William Henry Harvey.
5. Plantæ Wrightianæ Texano-Neo-Mexicanæ. pt. 1. By Asa Gray.
6. The law of deposit of the flood-tide; its dynamical action and office. By C. H. Davis.
7. Descriptions of ancient works in Ohio. By C. Whittlesey.

Appendix. Ephemeris of the planet Neptune, 1852.

Occultations visible in the United States during 1852.

Vol. iv. Grammar and dictionary of the Dakotah language. By S. R. Riggs.

Vol. v. 1. Introduction.
2. A flora and fauna within living animals. By Joseph Leidy.
3. Memoir upon the extinct species of fossil ox. By Joseph Leidy.
4. Anatomy of the nervous system of Rana Pipiens. By Jeffries Wyman.
5. Nereis Boreali-Americana, etc. Pt. 2. By W. H. Harvey.
6. Plantæ Wrightianæ Texano-Neo-Mexicanæ Pt. 2.

Vol. vi. 1. Introduction.
2. Plantæ Fremontianæ. By J. Torrey.
3. Observations on the Batis Maritima of Linnæus. By J. Torrey.
4. On the Darlingtonia Californica. A new pitcher plant. By J. Torrey.
5. Synopsis of the marine invertebrata of Grand Menan. By W. Stimpson.
6. On the winds of the northern hemisphere. J. H. Coffin.
7. The ancient fauna of Nebraska. By J. Leidy.

Appendix. Occultations of planets and stars by the moon during the year 1853. By J. Downes.

Vol. vii. 1. Introduction.
2. Account of a tornado near New-Harmony. By John Chappelsmith.
3. Notes on new species and localities of microscopical organisms. By J. W. Bailey.
4. The antiquities of Wisconsin, as surveyed and described by I. A. Lapham.
5. Memoir on the extinct sloth tribe of North America. By J. Leidy.

Appendix. Publications of learned societies and periodicals in the library of the institution, Dec. 31, 1854. Pt. 1.

Vol. viii. 1. Introduction.
2. Archæology of the United States. By Samuel F. Haven.
3. On the recent secular period of the aurora borealis. By D. Olmstead.
4. The tangencies of circles and of spheres. By B. Alvord.

Digitized by Google

Smithsonian institution—Continued.

5. Researches, chemical and physiological, concerning certain North American vertebrata. By Joseph Jones.

Appendix. Record of auroral phenomena. By P. Force.

Publications of the learned societies and periodicals in the library of the institution, Dec. 31, 1854. Pt. 2.

Vol. ix. 1. Introduction.

2. On the relative intensity of the heat and light of the sun upon different latitudes of the earth. By L. W. Meech.

3. Illustrations of surface geology. By Edward Hitchcock.

4. Observations on Mexican history and archæology. By Brantz Mayer.

5. Researches of the ammonia cobalt bases. By W. Gibbs and F. A. Genth.

Appendix. New tables for determining the values of the coefficients in the perturbative functions of planetary motion, which depend upon the ratio of the mean distances. By J. D. Runkle.

Asteroid supplement to new tables. By J. D. Runkle.

Vol. x. 1. Introduction.

2. Nereis Boreali-Americana, or contributions to a history of the marine algæ of North America. Pt. 3. By W. H. Harvey.

3. Magnetical observations in the Arctic seas. By E. K. Kane.

4. A grammar and dictionary of the Yoruba language. By T. J. Bowen.

Vol. xi. 1. Introduction.

2. North American oology. Part 1. Raptores and Fissirostres. By T. M. Brewer.

3. An account of the total eclipse of the sun, Sept. 7, 1858, as observed near Olmos, Peru. By I. M. Gillis.

4. Discussions of the magnetic and meteorological observations at the Girard college. By A. D. Bache.

5. Meteorological observations on the Arctic seas. By E. K. Kane.

6. The coleoptera of Kansas and Eastern New Mexico. By J. L. LeConte.

7. Observations on terrestrial magnetism in Mexico. By A. Sonntag.

8. On certain storms in Europe and America. Dec., 1836. By E. Loomis.

Vol. xii. 1. Introduction.

2. Astronomical observations on the Arctic seas By E. K. Kane.

3. Fluctuations of level on the North American lakes. By Charles Whittlesey.

4. Meteorological observations made at Providence, R. I., from Dec., 1831, to May, 1860. By Alexis Caswell.

5. Meteorological observations made near Washington, Ark., from 1840 to 1859. By Nathan D. Smith.

6. Venom of the rattlesnake. By S. Weir Mitchell.

Vol. xiii. 1. Introduction.

2. Tidal observations in the Arctic seas. By E. K. Kane.

Smithsonian institution—Continued.

3. Meteorological observations in the Arctic seas. By L. McClintock.

4. Ancient mining on the shores of Lake Superior. By Charles Whittlesey.

5, 6, 7. Magnetic and meteorological observations, Girard college, 1840–45. Parts 2–6. By A. D. Bache.

8. Records and results of a magnetic survey of Pennsylvania and parts of adjacent states. By A. D. Bache.

9. Anatomy and physiology of respiration in the Chelonia. By S. W. Mitchell and G. R. Morehouse.

Vol. xiv. 1. Introduction.

2, 3. Magnetic and meteorological observations, Parts 7-12. By A. D. Bache.

4. Construction of a silvered glass telescope, and its use in celestial photography. By Henry Draper.

5. Palæontology of the Upper Missouri. Invertebrate. By F. B. Meek and F. V. Hayden.

6. Cretaceous reptiles of the United States. By Joseph Leidy.

Vol. xv. 1. Introduction.

2. Investigations of the orbit of Neptune. By Simon Newcomb.

3. On the fresh water glacial drift of the northwestern states. By Charles Whittlesey.

4. Geological researches in China, Mongolia and Japan. By Raphael Pumpelly.

5. Physical observations in the Arctic seas. By I. I. Hayes.

Vol. xvi. 1. Introduction.

2. The gray substance of medulla oblongata and trapezium. By John Dean.

3. Meteorological observations made at Brunswick, Maine By Parker Cleaveland.

4. Meteorological observations made at Marietta, Ohio, 1826–1859. By S. P. Hildreth.

5. On the Gliddon mummy case in the museum of the Smithsonian institution. By Charles Pickering.

6. Orbit and phenomena of a meteoric fire-ball seen July 20, 1860. By James H. Coffin.

7. Transatlantic longitude. By Benjamin Apthorp Gould.

8. Indians of Cape Flattery, Washington Territory. By James G. Swan.

Vol. xvii. 1. Introduction.

2. Systems of consanguinity and affinity of the human family. By Lewis H. Morgan.

Vol. xviii. 1. Introduction.

2. Tables and results of the precipitation of rain and snow, in the United States, adjacent parts of North America, in Central and South America. Under direction of J. Henry. By Charles A. Schott.

3. Memoir of the secular variations of the elements of the eight principal planets; Mercury, Venus, the Earth, Mars, Jupiter, Saturn, Uranus, and Neptune; with tables of the same; obliquity of the ecliptic, and the precession of the equinoxes in both longitude and right ascension. By John N. Stockwell.

4. Observations on terrestrial magnetism and deviations of compasses. By William Harkness.

Digitized by Google

Smithsonian institution—Continued.

5. Converging series expressing the ratio between the diameter and the circumference of a circle. By William Ferrel.

Vol. xix. 1. Introduction.

2. Problems of rotary motion presented by the gyroscope, the precession of the equinoxes, and the pendulum. By J. G. Barnard.

3. Contribution to the history of the fresh water algæ of North America. By Horace C. Wood.

4. Investigation of the orbit of Uranus, with general tables of its motion. By Simon Newcomb.

Vol. xx. Winds of the globe; or, the laws of atmospheric circulation over the surface of the earth, by James H. Coffin; with tables and maps drawn by Selden J. Coffin; and analysis of tables and charts by Alexander Woeikoff.

Vol. xxi. 1. Introduction.

2. Statement and exposition of certain harmonies of the solar system. By Stephen Alexander.

3. On the general integrals of planetary motion. By Simon Newcomb.

4. The Haidah Indians of Queen Charlotte's islands, British Columbia; with a brief description of their carvings, tattoo designs, etc. By James G. Swan.

5. Tables, distribution, and variations of the atmospheric temperature in the United States and some adjacent parts of America. By Charles A. Schott.

——— ——— Smithsonian miscellaneous collections. v. 1–12, 1862–74 ———.

CONTENTS.

Vol. i. 1. Directions for meteorological observations, and the registry of periodical phenomena. 1860. pp. 70.

2. Psychrometrical table for determining the force of aqueous vapor, and the relative humidity of the atmosphere from indications of the wet and the dry bulb thermometer, Fahrenheit. By James Coffin. 1856.

3. Tables, meteorological and physical, prepared for the Smithsonian institution. By Arnold Guyot. 2d edition enlarged and revised. 1859.

Vol. ii. 1. On recent improvements in the chemical arts. By James C. Booth and Campbell Morfit. 1852.

2. Extracts from the Proceedings of the Board of regents of the Smithsonian institution, in relation to the electro-magnetic telegraph. (Reprinted from the Proceedings of the Board of regents for 1857.)

Vol. iii. 1. Catalogue of the described diptera of North America. Prepared for the Smithsonian institution by R. Osten-Sacken. With supplement. 1858.

2. Catalogue of the described lepidoptera of North America. Prepared by John G. Morris. 1860.

3. Classification of the coleoptera of North America. Prepared by John G. LeConte. *Illus.* pp. 1–208, 1831; 209–278, 1862.

4. Catalogue of publications of societies, and of other periodical works in the library of the Smithsonian institution. 1858. Foreign works. 1859.

Smithsonian institution—Continued.

Vol. iv. 1. Synopsis of the described neuroptera of North America, with a list of the South American species. Prepared for the Smithsonian institution by Herman Hagen. 1861.

2. Synopsis of the described lepidoptera of North America. Part 1. Diurnal and crepuscular lepidoptera. Compiled by John G. Morris. *Illus.* 1862.

Vol. v. 1. Bibliography of North American conchology previous to 1860. Part 1. American authors. Prepared by W. G. Binney. 1863.

2. Catalogue of publications of the Smithsonian institution. Corrected, 1862.

3. List of foreign correspondents of the Smithsonian institution. Corrected, 1862.

4. Catalogue of portraits of North American Indians, with sketches of scenery, etc.; painted by J. M. Stanley. Deposited with the Smithsonian institution, December, 1852.

5. Catalogue of North American birds, chiefly in the museum of the Smithsonian institution. By Spencer F. Baird. First octavo edition. 1859.

6. Catalogue of North American reptiles, in the museum of the Smithsonian institution. Part 1. Serpents. By S. F. Baird and C. Girard. January, 1853.

7. Check list of the shells of North America. Prepared for the Smithsonian institution, by Isaac Lea, P. P. Carpenter, W. Stimpson, W. G. Binney, and Temple Prime.

8. Directions for collecting, preserving, and transporting specimens of natural history. Prepared for the use of the Smithsonian institution. 3d ed. 1859.

9. Circular to officers of the Hudson's bay company. 1860.

10. Instructions in reference to collecting nests and eggs of North American birds; pp. 22, and 18 woodcuts. Circular in reference to North American grasshoppers; pp. 4. Circular in reference to collecting North American shells; pp. 4. 1860.

11. Circular in reference to the degrees of relationship among different nations. By L. H. Morgan.

Vol. vi. 1. Monographs of the diptera of North America. Prepared for the Smithsonian institution, by H. Loew. Part 1 ed., with additions, by R. Ostensacken. 1862.

2. Monographs of the diptera of North America. Prepared by H. Loew. Part 2 ed. by R. Ostensacken. *Illus.* 1864.

3. List of the coleoptera of North America. Prepared by John L. Leconte. Part 1. 1863.

4. New species of North American coleoptera. Prepared by John L. Leconte. 1863–66.

Vol. vii. 1. Monographs of the bats of North America. By H. Allen. *Illus.* 1864.

2. Land and fresh water shells of North America. Part 2. Pulmonata limnophila and thalassophila. By W. G. Binney. *Illus.* 1865.

3. Land and fresh water shells of North America. Part 3. Ampullaridæ, valvatidæ, viviparidæ, fresh-water rissoidæ, cyclophoridæ, truncatellidæ, fresh-water neritidæ, helicinidæ. By W. G. Binney. *Illus.* 1865.

Digitized by Google

Smithsonian institution—Continued.

4. Researches upon hydrobiinæ, and allied forms: chiefly made from materials in the museum of the Smithsonian institution. By William Stimpson. *Illus.* 1865.
5. Monograph of American corbiculadæ (recent and fossil). Prepared by Temple Prime. *Illus.*
6. Check list of the invertebrate fossils of North America; eocene and oligocene. By T. A. Conrad. 1866.
7. Check list of the invertebrate fossils of North America; miocene. By F. B. Meek. 1864.
8. Check list of the invertebrate fossils of North America; cretaceous and jurassic. By F. B. Meek. 1864.
9. Catalogue of minerals, with their formulæ, etc. Prepared by T. Egglestone. 1863.
10. A dictionary of the Chinook jargon, or trade language of Oregon. By George Gibbs. 1863.
11. Instructions for research relative to the ethnology and philology of America. By George Gibbs. 1863.
12. List of works published by the Smithsonian institution. 1866.

Vol. viii. 1. Monographs of the diptera of North America. Part 4. Prepared by R. Osten-sacken. *Illus.* 1869.
2. Catalogue of the orthoptera of North America described previous to 1867. Prepared by Samuel H. Scudder. 1868.
3. Land and fresh-water shells of North America. Part 1. Pulmonata geophila. By W. G. Binney and T. Bland. *Illus.*
4. Arrangement of families of birds. 1866.
5. Circular to officers of the Hudson's bay company. 8°. 1860.
6. Suggestions relative to objects of scientific investigation in Russian America. 8°. 1867.
7. Circular relating to collections in archæology and ethnology. 8°. 1867.
8. Circulars to entomologists. 8°. 1860.
9. Circular relative to collections of birds from Middle and South America. 8°. 1863.
10. Smithsonian museum miscellanea. 1862.

Vol. ix. 1. Biography of North American conchology, previous to 1860. Part 2. Foreign authors. Prepared by W. G. Binney. 8°. 1864.
2. Catalogue of publications of societies, and of periodical works, belonging to the Smithsonian institution, 1866. Deposited in the library of congress. 1866.

Vol. x. 1. Mollusks of Western North America, embracing the second report made to the British association on this subject, with other papers; reprinted, by permission, with a general index By Philip P. Carpenter. 1872.
2. Arrangement of the families of mollusks. Prepared by Theodore Gill. 1871.
3. Instructions for observations of thunder storms. By Joseph Henry.
4. Circular relative to heights. By Joseph Henry.
5. Directions for constructing lightning-rods. By Joseph Henry.
6. Queries relative to tornadoes. By J. Henry.
7. Questions relative to the food fishes of the United States. By S. F. Baird.

Smithsonian institution—Continued.

8. Memoranda of inquiry relative to the food fishes of the United States. By S. F. Baird.
9. List of the institutions, libraries, colleges, and other establishments in the United States, in correspondence with the Smithsonian institution. 1872.
10. Lists of foreign correspondents of the Smithsonian institution. Corrected, 1872. 4th ed. 1872
11. Check list of publications of the Smithsonian institution. 1872.
1. Arrangement of the families of mammals. Prepared by Theodore Gill. 1872.
2. Arrangement of the families of fishes, or classes pisces, marsipobranchii, and leptocardii. Prepared by Theodore Gill. 1872.
3. Monographs of the diptera of North America. Part 3. Prepared by H. Loew. *Illus.* 1873.
4. Directions for collecting and preserving insects. Prepared by A. S. Packard, jr. 1873.
5. New species of North American coleoptera. Part 2. Prepared by John L. LeConte. 1873.
6. Classification of the coleoptera of North America. Part 2. Prepared by J. L. LeConte. 1873.

Vol. xii. 1. Review of American birds in the museum of the Smithsonian institution. Part 1. By S. F. Baird. 1864–72.
2. The constants of nature. Part 1. Specific gravities; boiling and melting points; and chemical formulæ. Compiled by F. Wigglesworth Clarke. 1873.
3. Telegraphic announcements of astronomical discoveries By Joseph Henry. 1873.

SMITHWORK. Musterzeichnungen von Schmiedearbeiten. *See* HESSE-DARMSTADT.

SMOKE, Combustion of. *See* **Hood**, C.

——— Furnaces used for smoke prevention. *See* **Armstrong**, R. Modern practice of boiler engineering.

——— Furnaces used for smoke prevention, by R. Armstrong. *See* **Campin**, F. Mechanical engineering.

——— Prevention of. *See* **Williams**, C. W.

——— Prevention of smoke in domestic fireplaces. *See* **Edwards**, F., *jr.*

——— Verhütung des Rauchens. *See* **Wolpert**, A. Ventilation in Luftheizung.

SMOKING and drinking. *See* **Parton**, James.

——— fires; their cause and cure. *See* **Ainslie**, Alexander Colvin.

Smyth, C. Piazzi. Teneriffe, an astronomer's experiment; or, specialities of a residence above the clouds. *Illus.* 8°. *London*, 1858.

Smyth, James Carmichael. The effect of nitrous vapour in preventing and destroying contagion, ascertained by trials made by surgeons, in prisons, hospitals and on

Digitized by Google

Smyth, James Carmichael—Continued. board of ships. New ed. 8°. *Philadelphia*, 1815.

Smyth, R. Brough. Catalogue of the Victorian exhibition, 1861 *See* **Archer,** W. H.

——— The gold fields and mineral districts of Victoria; with notes on the modes of occurrence of gold and other metals and minerals. 4°. *Melbourne*, 1869.

Smyth, William. Elements of analytical geometry. 8°. *Boston*, 1855.

——— Elements of differential and integral calculus. 8°. *Portland*, 1854.

Smyth, W. H. The sailor's word-book; a digest of nautical terms, including some scientific and military, but useful to seamen: as well as archaisms of early voyages, etc. Revised by E. Belcher. 8°. *London*, 1867.

Smyth, William Henry. Biographies of distinguished scientific men; transl. by. *See* **Arago,** D. F. J.

Snell, Daniel W. A description of the positive self-graduating warp-delivery motion as applied to looms. 8°. *Woonsocket*, 1855. pp. 8.

——— The manager's assistant; a condensed treatise on the cotton manufacture, with explanations, various calculations, tables, comparisons, etc. 16°. *Hartford*, 1850.

Snelling, Henry H. A dictionary of the photographic art. *Illus.* 8°. *New York*, 1854.

——— The history and practice of the art of photography. *Illus.* 12°. *New York*, 1849. 4th ed., 1853.

——— Photographic and fine art journal; ed. by. *See* **Photographic.**

Snorro Sturlasson. *See* **Sturlasson,** Snorre.

Snow, John. Chloroform and other anæsthetics; their action and administration. Ed., with a memoir of the author, by Benjamin W. Richardson. 8°. *London*, 1858.

Snowden, James Ross. A description of ancient and modern coins in the cabinet collection at the mint of the United States. 8°. *Philadelphia*, 1860.

SOAP. Abridgments English Patents, No. 27.

——— and candles. Art of manufacturing. *See* **Ott,** Adolph.

——— and candles, Chemistry applied to the manufacture of. *See* **Morfit,** Campbell.

——— Art de fabriquer les savons. *See* **Dussard. Encyclopédie populaire, v. 4.**

SOAP. Art du savonnier, par H. L. Duhamel du Monceau. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 39 and 8.**

——— Art of manufacturing. *See* **Kurten,** P.

——— bubbles, by Rücker. *See* **Science lectures for the people, series 7.**

——— Kunst des Seifensiedens. *See* **Kunst 4 Neuer Schauplatz der Künste.**

——— Manuel du savonnier. *See* **Gacon-Dufour,** *Mme.* **119 Manuels Roret.**

SOAP, The manufacture of. *See* **Dussauce,** H.

——— Die Seifenfabrication. *See* **Schmidt,** C. H. **193 Neuer Schauplatz der Künste.**

——— Silicate of soda applied to. *See* **Silicate.**

——— Toilet. Darstellung der feinen Toiletseifen. *See* **Ramberg,** Wilhelm. **246 Neuer Schauplatz der Künste.**

——— A treatise on soap making. *See* **Treatise.**

SOCIAL bees. *See* **Wynter,** Andrew.

——— science, Principles of. *See* **Carey,** H. C.

Société (La) séricicole. De la filature; ou de l'art de tirer la soie des cocons. 8°. [*Paris*, 1839.] *n. t. p.*

SOCIETIES, Catalogue of the publications of, in the Smithsonian institution. *See* **Smithsonian.**

——— The learned societies of the United Kingdom. *See* **Hume,** A.

——— Secret. *See* **Secret** societies.

SOCIETY, Civil. Begriff der bürgerlichen Gesellschaft. *See* **Riehl,** W. H.

——— festivals. Jubiläums-Bericht der Centralleitung des Wohlthätigkeits-Vereins Württemberg. *See* WURTEMBERG. **Wohlthätigkeits-Verein.**

——— for promoting Christian knowledge. *See* LONDON.

——— for the diffusion of useful knowledge. *See* LONDON.

——— for the encouragement of arts, manufactures and commerce. *See* LONDON.

——— of arts and institutions in union. *See* LONDON.

——— Origin of. *See* **Darwin,** Erasmus. Temple of nature.

——— Origine des premières sociétés des peuples. *See* **Origine.**

SOCIOLOGY, The study of. *See* **Spencer,** Herbert. **International scientific series, v. 5.**

SODA water. Catalogue of Puffer's apparatus. *See* **Puffer,** A. D.

Digitized by Google

SOILS, Treatise on loamy. *See* **Donaldson. Weale's series, No. 66.**

SOLDERING. Die Löth-Kunst. *See* **Thon, C. F. G. 137 Neuer Schauplatz der Künste.**

Solleysell, *Sieur* de. The art of shoeing horses; to which are added notes on his practice, by Frederick Clifford Cherry. 8°. *London*, 1842.

Solly, Edward. Rural chemistry; elementary introduction to the study of the science in its relation to agriculture. 2d ed. 18°. *London*, 1844.

——— Syllabus of a complete course of lectures on chemistry, including its applications to the arts, agriculture and mining. 8°. *London*, 1849. Also rev. ed., 1850.

——— Vegetable substances used in arts and manufactures. *See* **Lectures** on the results of the exhibition.

Soltykoff, Pierre. Collection archéologique. Instruments horaires du 16e siècle. *See* **Dubois,** Pierre.

SOLVING algebraic problems, A graphic method for. *See* **Vose,** George L. **Van Nostrand's science series, No. 16.**

Some suggestions concerning the nature and treatment of the decay of the teeth. 12°. *Baltimore*, 1866.

Somerset, Edward, *Marquis of Worcester.* A century of inventions; from the original mss., with historical and explanatory notes and a biographical memoir, by Charles F. Partington. 16°. *London*, 1824.

——— Century of inventions. *See* **Dircks,** H-nry.

Somerville, *Mrs.* Mary. The connection of the physical sciences. From 7th London ed. 12°. *New York*, 1857.

——— Molecular and microscopic science. v. 1. Atoms, and molecules of matter; vegetable organisms. v. 2. Animal organisms. *Illus.* 8°. *London*, 1869.

——— Physical geography. New American from 3d London ed. With notes and glossary, by W. S. W. Ruschenberger. 8°. *Philadelphia*, 1853. Also ed., 1855.

SONDERSHAUSEN. Fürstliche Realschule. Öffentliche Prüfung. Director G. F. C. Hölzer. fol. *Sondershausen*, 1872.

——— Fürstliches Landesseminar und Seminarschule. Schulnachrichten von 1860 bis 1866. Hrsg. v. R. Helmrich. 8°. *Sondershausen*, 1867.

Sopwith, T. Treatise on isometrical drawing, as applicable to geological and mining plans, picturesque delineations of ornamental grounds, perspective views, and working plans of building and machinery; and to general purposes of civil engineering; details of improved methods of preserving plans and records of subterranean operations in mining districts. *Illus.* 2d ed. 8°. *London*, 1838.

SORGHUM, and its products. *See* **Stewart,** F. L.

Soriano Fuertes, Mariano de. Calendario histórico musical para el año de 1873. 8°. *Madrid*, 1872.

Soulange, Bodin. Dictionnaire de l'industrie; par. *See* **Baudrimont,** A. E., and others.

Soule, Richard. A dictionary of English synonymes. 8°. *Boston*, 1871-73. [2 copies.]

Soulet d'Uzerche, —. Rapport des nouveaux poids et mesures, avec ceux de tous les pays; suivi du calcul des intérêts par méthodes neuves. 4°. *Paris, n. d.*

SOUND. *See, also,* **Acoustics.**

——— *See* **Tyndall,** John.

——— and light. *See* **Deschanel,** A. Privat.

——— Communication of. *See* **Reid,** D. B.

——— Gesetze des Schalles. *See* **Newth,** L. **190 Neuer Schauplatz der Künste.**

——— in its relation to music, Theory of. *See* **Blaserna,** Pietro.

Sound dues, and their relations with general commerce. Transl. from the German. 8°. *Stettin*, 1854. pp. 39.

——— ——— Le droit du Sund et le commerce du monde. *See* **Droit.**

SOUTH AMERICA, List of neuroptera of. By H. Hagen. **Smiths'n misc. coll., v. 4.**

——— Relation d'un voyage fait dans l'intérieur de l'Amérique méridionale. *See* **La Condamine.**

SOUTH KENSINGTON museum. Art and science handbooks. 12°. *New York*, 1875-76 ——.

No. 1. Textile fabrics. By John Rock.
2. Ivories, ancient and mediæval. By William Maskell.
3. Ancient and modern furniture and woodwork. By John Hungerford Pollen.
4. Maiolica. By C. Drury E. Fortnum.
5. Musical instruments. By Carl Engel.
6. A manual of design. By Richard Redgrave.
7. Persian art. By R. Murdoch Smith.
8. The industrial arts. By W[illiam] M[askell].
9. Special loan collection of scientific apparatus.

Digitized by Google

SOUTH KENSINGTON museum. Catalogue of the educational division. 2d ed. 8°. *London*, 1857. Also 6th ed., 1860.

Southern botanic physician. *See* **Abbott**, Simon B.

Southey, Robert, and **Bell,** Robert. Lives of the British admirals; with introductory view of the naval history of England. 5 v. 16°. *London*, 1833–40. **Lardner's cabinet cyclopædia, v. 70–74.**

Soyer, Alexis. Culinary campaign; historical reminiscences of the late war; art of cooking for military and civil institutions; the army, navy, etc. 12°. *London*, 1857.

——— Gastronomic regenerator; a new and simple system of cookery, with 2000 receipts. 8th ed. 8°. *London*, 1852.

——— The modern housewife, or ménagère; ed. by an American housekeeper. *Illus.* 12°. *New York*, 1850.

——— The pantropheon; or, history of food and its preparation, from the earliest ages of the world; the greatest gastronomic marvels of antiquity. *Illus.* 8°. *London*, 1853.

Spačil, Johann. Wagen, Dynamometer und Materialprüfungsmaschinen. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 19.**

SPAIN and the east, Sketches of travel in. *See* **Swift,** J. A.

——— The Arabian antiquities of. *See* **Murphy,** James C.

——— Biblioteca nacional. Breve noticia de la biblioteca nacional. 8°. *Madrid*, 1876. pp. 33.

——— History of. *See* **Dunham,** S. A. **Lardner's cabinet cyclopædia, v. 23–27.**

——— Instruccion pública. Colegio nacional de sordo-mudos y de ciegos de Madrid. Su historia, su organizacion, su estado actual, y catálogo de los objetos que remite á la esposicion internacional de Filadelfia en 1876. Por D. Pedro Cabello y Madurga. 8°. *Madrid*, 1873.

——— Lives of literary and scientific men of *See* **Shelley,** M. W., and others. **Lardner's cabinet cyclopædia, v. 88–90.**

——— Voyage en Espagne dans 1816–1819. *See* **Passa,** Jaubert de.

Spamer, Otto. Agenda für den Photographen. *See* **Krüger,** J., and **Spamer,** O.

Spangenburg, Ludwig. The fatigue of metals under repeated strains; with various tables, the results of experiments. From the German of; with a preface, by S. H. Shreve. 18°. *New York*, 1876. **Van Nostrand's science series, No. 23.**

SPANISH-English dictionary. *See* **Baretti,** J.

——— ——— ——— *See* **Neuman,** H.

——— ——— ——— *See* **Pineda,** Peter.

——— primer, The. *See* **Doüin,** *Mme.*

Spare, John. The differential calculus. 12°. *Boston*, 1865.

Sparks, Jared. The library of American biography. 2d series. 12°. *Boston*, 1846–47.

v. 8. Lives of Charles Lee and Joseph Reed.
9. Lives of Leonard Calvert, Samuel Ward and Thomas Posey.
10. Life of Nathanael Greene. By George W. Greene.
14. Life of John Ledyard.

Sparling, Marcus. Photographic art. *See* **Gore,** G., **Sparling,** M. **Orr's circle of the sciences, v. 7.**

——— Photographic art; its theory and practice; including its chemistry and optics. Revised by James Martin. 12°. *London and Glasgow*, 1860.

SPECIES, Geological evidences of the antiquity of man and origin of. *See* **Lyell,** Charles.

——— not transmutable, nor the result of secondary causes. *See* **Bree,** C. R.

——— On the origin of. *See* **Darwin,** C.

SPECIFIC gravity. Pesanteur spécifique des corps. *See* **Brisson,** M. J.

Specimens of fancy turning, executed on the hand or foot lathe, with geometric, oval and eccentric chucks, and elliptical cutting frame. By an amateur. *Illus.* 8°. *Philadelphia*, 1869.

——— of tables, calculated, stereo-moulded and printed by machinery. By the calculating machine of G. and E. Shultz. 8°. *London*, 1857. pp. 18 + 50.

SPECTRUM analysis. *See* **Roscoe,** Henry E. **Science lectures for the people, series 2.**

——— ——— in its application to heavenly bodies. *See* **Huggins,** W. **Science lectures for the people, series 2.**

——— ——— Die Spectralanalyse in ihrer Anwendung auf die Stoffe der Erde und die Natur der Himmelskörper. *See* **Schellen,** H.

Digitized by Google

SPECTRUM, Solar. De mutationibus quae contingunt in spectro solari fixo. *See* **Zantedeschi**, F.

——— Researches on. *See* **Kirchhoff**, G.

SPELLING book, The euphonic. *See* **Hazen**, Edward.

Spence, Jasper. W. E. Kidd vs. J. Spence et al. Opinion of Judge Ingersoll. *See* **Kidd**, W. E.

Spence, William. Patentable invention and scientific evidence. 8°. *London*, 1851.

——— Practical remarks on the present state of the law of patents. 8°. *London*, 1852. pp. 31.

——— A treatise on the principles relating to the specification of a patent for invention; showing the standard by which the sufficiency of that instrument is to be tried. 8°. *London*, 1847.

Spencer, Charles Child. The rudiments of the art of playing the pianoforte, with numerous exercises and lessons. 12°. *London*, 1853. **Weale's series, No. 71.**

Spencer, Herbert. First principles of a new system of philosophy. 12°. *New York*, 1865.

——— The principles of biology. 2 v. 12°. *New York*, 1868.

——— The study of sociology. 12°. *New York*, 1874. **International scientific series, v. 5.**

Spencer, Platt R. Spencerian key to practical penmanship. 8°. *New York*, 1866.

SPERMATORRHŒA, On. *See* **Bartholow**, Roberts.

Spetzler, J. A. Anleitung zur Anlage artesischer Brunnen. *Illus.* 8°. *Lübeck*, 1832.

SPHERE and cylinder. A short treatise upon atmospheric phenomena. *See* **Rucker**, J. M.

SPIDERS, Silk from. *See* **Termeyer**, Raymond Maria de.

——— Tableau des aranéides. *See* **Walckenaer**, C. A.

SPIDERWORTS. Commelinaceae Indicae; imprimis archipelagi Indici, adjectis hisce terris alienis. *See* **Hasskarl**, Carolus.

Spielmann, Jacques Reinbold. Institutiones chemiae praelectionibus academicis adcommodatae. Editio altera, revisa, aucta et polita. 8°. *Argentorati*, 1766.

Spiers, A. Dictionnaire général anglais-français; français-anglais. T. 1–2. 5e éd 8°. *Paris*, 1853.

——— Manual of commercial terms in English and French. *London*, 1846.

——— A pronouncing school dictionary of the French and English languages; abridged from the author's general dictionary. 8°. *New York*, 1854.

——— and **Surenne**, G. Spiers and Surenne's French and English and English and French dictionary: with vocabulary of the names of places and persons, ancient and modern. Enlarged by G. P. Quackenboss. 8°. *New York*, 1858. [10 copies.]

SPINE, Injuries of. *See* **Ashurst**, John, *jr.*

SPINNING. Abridgments English Patents, No. 28.

——— American cotton spinner's guide. *See* **Baird**, R. M.

——— Atlas für mechanische Technologie: Spinnerei. *See* **Krohnauer**, J. H.

——— Die Baumwollen-Spinnerei. *See* **Niess**, Benno **288 Neuer Schauplatz der Künste.**

——— Der Flachs-, Hanf- u. Wergspinner. *See* **Ancellin**, C. **236 Neuer Schauplatz der Künste.**

——— Lehrbuch der Spinnereimechanik. *See* **Schmidt**, C. N.

——— Origin of spinning by rollers, by R. Cole. *See* **French**, G. J. Life of Crompton.

——— Die Spinnerei-Industrie. *See* **Ramming**, Hermann. **281 Neuer Schauplatz der Künste.**

——— Spinnerei-Maschinen. Von Johann Fernau. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

——— Streichgarn-Spinnerei und Kunstwoll-Industrie. *See* **Grothe**, Hermann.

——— Traité de la filature du lin et du chanvre. *See* **Coquelin**, C.

SPIRIT level, An essay on the. *See* **Blackett**, Oswald T.

SPIRITS, distilled. Praktischer Wegweiser zur Spiritus-Fabrikation. *See* **Gumbinner**, L.

SPIROMETER. Theorie des Seitendruck-Spirometers. *See* **Harless**, E.

Spofford, Ainsworth R. An American almanac, and treasury of facts, statistical,

Digitized by Google

Spofford, Ainsworth R.—Continued.
financial and political, for 1878; ed. by. 8°. *New York and Washington*, 1878.

Spons' dictionary of engineering, civil, military, mechanical, naval; with technical terms in French, German, Italian and Spanish. Ed. by Oliver Byrne. 6 v. 8°. *London*, 1869-73.

SPONTANEOUS electricity. *See* **Read,** John.

SPOON (The); illustrating the primitive arts in domestic life. *See* **Westman,** Habakkuk, O.

Spooner, S. Biographical history of the fine arts; memoirs of the lives and works of eminent painters, engravers, sculptors, and architects, from the earliest ages to the present time; including the works of Vasari, Lanzi, Kugler, Waagen, Bryan, Pilkington, Walpole, C. Eastlake, and Mrs. Jameson. *Illus.* 2 v. 8°. *New York*, 1865.

SPORT, Philosophy in. *See* **Philosophy.**

SPORTING anecdotes. *See* **Klapp,** H. Milnor.

——— arms. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 16.**

——— Instructions to sportsmen. *See* **Hawker,** P.

SPORTS, American boy's book of. *See* **American.**

——— and games. Spielbuch für Knaben. *See* **Wagner,** Hermann.

——— and games. Spielbuch für Mädchen. *See* **Leske,** Marie.

——— and pastimes, Field book of. *See* **Field** book.

——— and pastimes of the people of England. *See* **Strutt,** Jos.

——— The boy's handy book of. *See* **Boy's** handy book of sports.

——— British rural. *See* **Walsh,** J. H.

SPORTSMAN, The. *See* **King,** W. Ross.

——— The American. *See* **Lewis,** E. J.

——— Complete manual for the young. *See* **Herbert,** H. W.

SPORTSMAN'S complete guide; by Marksman. *See* **Dead** shot.

SPORTSMEN, Hints to. *See* **Lewis,** E. J.

——— Instructions to young, in all that relates to guns and shooting. *See* **Hawker,** P.

SPOT-DIAL, The. *See* **Clark,** Gilbert.

Sprague, John T. Electricity; its theory, sources, and applications. 12°. *London*, 1875.

Spratt, T. An investigation of the movements of Teignmouth bar. 12°. *London*, 1856. pp. 28.

Spring, Charles A. Report of the case of Sloat vs. Spring et al. *See* **Harding,** G.

SPRINGS, Mineral and thermal, of the United States and Canada *See* **Bell,** John.

Sproule, John, and others. The resources and manufacturing industry of Ireland, as illustrated by the exhibition of 1853: being a series of essays on raw materials, machinery and manufactures of various kinds; to which is appended, the official catalogue of the exhibition; a portrait of Dargan, with a memoir; edited by Sproule, assisted by J. Beete Jukes, W. R. Sullivan, William Barker, Mills, James MacAdam, Henry Toole, and other eminent scientific and practical men. *Illus.* roy. 8°. *Dublin*, [1854].

SPURN POINT, Account of the lighthouse upon the. *See* **Smeaton,** J. Edystone lighthouse.

Squarey, Charles. A popular treatise on agricultural chemistry, for the use of the practical farmer. 8°. *London*, 1842.

SQUASHES. How to grow them; how to keep and to market the crop. *See* **Gregory,** James J. H.

Squier, Ephraim George. Aboriginal monuments of New York. **Smiths'n contrib., v. 2.**

——— American archæological researches, No. 1. The serpent symbol, and the worship of the reciprocal principles of nature in America. 8°. *New York*, 1851.

——— The states of Central America; geography, topography, climate, population, resources, productions, commerce, political organization, aborigines, etc. 8°. *New York*, 1858.

——— Tropical fibres; their production and economic extraction. 8°. *New York*, 1861.

——— and **Davis,** Edwin Hamilton. Ancient monuments of the Mississippi valley. **Smiths'n contrib., v. 1.**

Staedel, Wilhelm. Jahresbericht über die Fortschritte auf dem Gebiete der reinen Chemie; bearbeitet im Verein mit mehreren Fachgenossen und hrsg. von. Jahrg. 1-4. 8°. *Tübingen*, 1874-77——.

Stafford, H. N. The ready calculator, for slaters, quarrymen, architects, and dealers. 12°. *New York*, 1857.

Digitized by Google

Stahl, Albert W. Transmission of power by wire rope. *Illus.* 18°. *New York,* 1877. **Van Nostrand's science series, No. 28.**

Stahlberger, Emil. As Árapály a Fiuméi öbölben. A Kir. Magyar természettudományi-társulat által jutalmazott és kiadot tértekezés. 4°. *Buda Pest,* 1874.

STAINED glass. An account of the principal works. *See* **Willement,** Thomas.

——— ——— Koloriren und Dekoriren von Glas, etc. *See* **Strele,** Karl. **146 Neuer Schauplatz der Künste.**

——— ——— Staining and painting on glass. *See* **Whittock,** N.

STAINING. Das Beizen, Schleifen und Poliren. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

STAIR-builder, The scientific. *See* **Riddell,** Robert.

——— ——— The practical. *See* **Loth,** C. Edward.

——— builder's guide, A new geometrical. *See* **Stone,** Abel B.

——— building and hand-railing; the carpenter's guide. *See* **O'Neill,** Patrick.

——— ——— Anweisung zum Treppenbau. *See* **Wölfer,** M. **19 Neuer Schauplatz der Künste.**

——— ——— The art of. *See* **Perry,** J. R.

——— ——— Das Ganze des Treppenbaues. *See* **Boutereau,** C. **140 Neuer Schauplatz der Künste.**

——— ——— simplified. *See* **Vaughn,** W. M., and **Glenn,** W. W.

——— ——— Treppenbau in Holz. *See* **Romberg,** J. Andreas.

——— ——— Treppenwerk für Architekten. Abhandlung der Treppen in Holz. *See* **Behse,** W. H.

Stallo, J. B. General principles of the philosophy of nature; with an outline of its recent developments among the Germans. 12°. *Boston,* 1848.

Stamm, Ernest. Traité théorique et pratique des métiers à filer automates dits 'self-acting'. fol. 4°. *Paris,* 1861–62.

Stamm, Ferd. Pavillon des kleinen Kindes. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

——— and **Roditzky,** Helene v. Stickerei und Spitzen. Frauenarbeiten. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Stammer, Charles. Traité complet, théorique et pratique, de la fabrication du sucre. Guide du fabricant. 8°. *Paris,* 1870.

Stammer, K. Lehrbuch der Physik. *Illus.* 2 Bde. 8°. *Lahr,* 1858–59.

——— Lehrbuch der Zuckerfabrikation. 8°. *Braunschweig,* 1874.

——— Wegweiser in der Zuckerfabrication. Vorzugsweise zum Gebrauch für Fabrikbeamte, Techniker, Siedemeister. 8°. *Braunschweig,* 1876.

STAMMERING. Its effects, causes and remedies. *See* **Bronson,** C. P., and **Beers,** Charles C.

STANDARDS of measure and weight. *See* **Chrisholm,** H. W.

Stanley, J. M. Catalogue of portraits of Indians, painted by. **Smiths'n misc. coll., v. 2.**

Stanley, William Ford. A descriptive treatise of mathematical drawing instruments. 12°. *London,* 1866.

Stansbury, Charles F. Argument before the commissioner of patents on the 'Palmer leg'. *See* **Palmer,** B. F.

——— Argument on appeal to the board of examiners-in-chief, from the decision of the examiner, rejecting the application of John S. Gallaher, jr., assignor to Chambers, bro. and co., for a patent for a machine for folding paper; 17th July, 1861. Examiner's decision reversed, Nov. 29th, 1861. 8°. *Philadelphia,* 1862. pp. 11.

Stansbury, Howard. Exploration and survey of the valley of the Great Salt lake of Utah; including a reconnoissance of a new route through the Rocky mountains. 8°. *Philadelphia,* 1852.

STARCH. Fabrique de l'amidon. Par H. L. Duhamel du Monceau. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 40 and 8.**

——— Das Ganze der Stärke-Fabrication. *See* **Bergmann,** F. C. A. **39 Neuer Schauplatz der Künste.**

——— Handbuch der Stärkefabrikation. *See* **Wagner,** Ladislaus von. **39* Neuer Schauplatz der Künste.**

——— Manuel de l'amidonnier. *See* **Morin. 108 Manuels Roret.**

Starkie, Thomas. A practical treatise on the law of evidence. 8th American from 4th London edition., by George Morley Dowdeswell and John G. Malcolm; with

Digitized by Google

Starkie, Thomas—Continued.
notes and references to American cases, by George Sharswood. With notes to former American editions, by Theron Metcalfe, Edward D. Ingraham and Benjamin Gerhard. 8°. *Philadelphia*, 1860.

STARS. *See, also,* **Astronomy.**

——— A guide to the. *See* **Brooke,** Henry

——— The influence of. *See* **Ptolemy** Claudius.

——— Maps of the. *See* **Proctor,** Richard A.

——— The origin of the. *See* **Ennis,** Jacob.

STATE papers, American. *See* UNITED STATES. **Congress.**

STATES and territories, Our new. *See* **Richardson,** Albert D.

——— ——— ——— west of the Rocky mountains, Mineral resources of. *See* **Raymond,** Rossiter W.

STATESMEN, Lives of British. *See* **Mackintosh,** J., and others. **Lardner's cabinet cyclopædia, v. 76-82.**

——— Lives of foreign. *See* **James,** G. P. R., and **Crowe,** E. E. **Lardner's cabinet cyclopædia, v. 83-87.**

STATICS, An elementary treatise on. *See* **Monge,** Gaspard.

——— Lehren der Statik. *See* **Newth,** S. **109 Neuer Schauplatz der Künste.**

——— Principles and practice of. *See* **Baker,** T. **Weale's series, No. 97.**

STATIONERY. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 13.**

——— Manuel du marchand papetier. *See* **Manuel. Encyclopédie populaire, v. 7.**

——— Manuel du marchand papetier et du régleur. *See* **Julia de Fontenelle,** J. S. E., and **Poisson,** P. **107 Manuels Roret.**

STATISTICAL society of London. *See* LONDON.

——— tables from the treasury department. *See* **Delmar,** Alexander.

STATISTICS. Beiträge zur Statistik Mecklenburgs. *See* MECKLENBURG.

——— by G. R. Porter. *See* **Herschel,** J. F. W. Manual of scientific enquiry.

——— Census and statistics of Michigan, 1854. *See* MICHIGAN.

——— Census of Canada. *See* CANADA.

——— Census of the state of New York, 1855, 1865, 1867. *See* NEW YORK (state).

STATISTICS. Census of the United States. *See* UNITED STATES. **Interior** dept. Census bureau.

——— Documents statistiques de la Belgique. *See* BELGIUM.

——— Estadística de la república de Chili. Provincia del Maule. *See* CHILI.

——— Études de statistique. *See* **Wolowski,** L.

——— Jahrbuch für Statistik. *See* **Hübner,** O.

——— Leistungen der Statistik und allg. Bildungsmittel, von J. Löwenthal. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— Medical and anthropological. *See* **Baxter,** J. H.

——— Mittheilungen aus der Grossherzoglich Hessischen Centralstelle für die Landesstatistik. *See* DARMSTADT. [†]

——— of the United States. *See* **Delmar,** Alexander.

——— Population of Ohio, 1850. *See* OHIO.

——— Registry and returns of births, marriages, and deaths, Mass., 1855. *See* **De Witt,** F.

——— Statesman's year book. *See* **Martin,** F.

——— Statistica del regno d'Italia; movimento della navigazione nei porti del regno. *See* ITALY.

——— Statistical view of the United States, 1854. *See* **De Bow,** J. D. B.

——— Statistik der öffentlichen und Privat-Volksschulen. *See* **Schimmer,** Gustav Adolf.

——— Statistik des Unterrichts- und Erziehungswesens im Königreich Württemberg. *See* WURTEMBERG.

——— Statistiques de la Belgique; mines, minières, usines minéralurgiques et machines à vapeur. *See* BELGIUM.

——— Statistiques de la Belgique. Tableau général du commerce avec les pays étrangers. *See* BELGIUM.

——— Statistische Nachrichten über Oldenburg, 1855. *See* OLDENBURG.

——— Statistische Tafel aller Länder. *See* **Hübner,** O.

——— Statistisches Handbüchlein des Kaiserthumes Österreich für das Jahr 1865, 1866, 1868. *See* AUSTRIA.

——— Statistisches Handbüchlein für die österreichische Monarchie. *See* AUSTRIA.

Digitized by Google

STATISTICS. Sur le mouvement de l'état civil en Belgique, 1841–44. *See* **Heuschling, X.**

——— Tabellen und amtliche Nachrichten über den preussischen Staat für 1849–52. *See* PRUSSIA.

——— Tables of Russian, for 1856. *See* RUSSIA.

STATUES. Schleifen, Poliren, etc., des Marmors zu Statuen. *See* **Weber, Martin. 268 Neuer Schauplatz der Künste.**

STATUTES at large of the United States. *See* UNITED STATES. **Congress.**

——— Revised, of the United States; relating to the District of Columbia and post roads, passed at the 1st session of the 43d congress. *See* UNITED STATES. **Congress.**

——— Revised, of the United States, passed at the 1st session of the 43d congress, 1873–74. *See* UNITED STATES. **Congress.**

STAYS. Fertige Kleider. Mieder. Von Anton Kreuzig. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

STEAM applied to agriculture. *See* **Ritchie, R.**

——— boiler explosions. *See* **Colburn, Zerah. Van Nostrand's science series, No. 2.**

——— ——— ——— Die Dampfkessel-Explosionen. Beiträge zur Beurtheilung der Maassregeln für ihre Verhütung. *See* **Hartig, Ernst.**

——— ——— ——— Les explosions des machines à vapeur. *See* **Marestier.**

——— ——— ——— Gesetzliche Verordnungen die Anlegung von Dampfkesseln betreffend. *See* SAXONY.

——— ——— ——— Report of the commissioner of patents on. *See* UNITED STATES. **Interior** dept. Patent office.

——— ——— ——— Report of the Franklin institute on. *See* UNITED STATES. **Treasury** department.

——— boilers. Anlage und Betrieb der Dampfkessel. *See* **Reiche, H. v.**

——— ——— Chimneys for furnaces, fireplaces and. *See* **Armstrong, Robert. Van Nostrand's science series, No. 1.**

——— ——— Dampfkessel. Radinger. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 10.**

——— ——— Essay on. *See* **Harrison, Joseph.**

STEAM boilers. L'injecteur automoteur des chaudières à vapeur de Giffard. *See* **Reech.**

——— ——— Maschinenwesen. Die Dampfkessel. Von J. F. Radinger. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

——— ——— Strength of cylindrical. *See* **Johnson, W. R.**

——— ——— Tests of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group **.**

——— ——— Treatise on. *See* **Armstrong, R. Weale's series, No. 59.**

——— carriages, Advantages of employing, on common roads. *See* **Hancock, W.**

——— ——— Report on, by a select committee of house of commons. *See* UNITED STATES. **Congress.**

——— Condensation of. *See* **Burg, N. P.**

——— cultivation, A letter on. *See* **Smith, W.**

——— ——— Pamphlet on. *See* **Williams, J. A.**

——— culture. **Abridgments English Patents, No. 8.**

——— engine. **Abridgments English Patents, No. 49.**

——— ——— Account of the. *See* **Millington, J.**

——— ——— and its inventors. *See* **Hamilton, George.**

——— ——— A catechism of the. *See* **Bourne, J.**

——— ——— Chemistry of the, and description of the universal condensing. *See* **Craddock, T.**

——— ——— Compound engines. *See* **Mallet, A. Van Nostrand's science series, No. 10.**

——— ——— Compound; relative areas of the two cylinders. *See* **Turnbull, John, *jr.* Van Nostrand's science series, No. 8.**

——— ——— Construction and action of the. *See* **Reid, H.**

——— ——— Development of the. *See* **Ewbank, T.** Hydraulic machines.

——— ——— Elementary treatise on steam and the steam engine. *See* **Clark, D. Kinnear.**

——— ——— explained. *See* **Lardner, D.**

——— ——— for practical men. *See* **Hann, J., and Gener, P. and J.**

Digitized by Google

STEAM engine. Fortschritte in der Construction der Dampfmaschinen. *See* **Schmidt**, R.

——— ——— Grundsätze der Dampfmaschinen. *See* **Verdam**, G. J. **69-71 and 100 Neuer Schauplatz der Künste.**

——— ——— Guide du chauffeur, et du propriétaire des machines à vapeur. *See* **Grouvelle** and **Jaunez.**

——— ——— Handbook of the; a key to the catechism. *See* **Bourne**, John.

——— ——— Handbuch der Dampfmaschinen. *See* **Grouvelle, Jaunez**, and **Jullien.**

——— ——— High pressure. *See* **Alban**, E.

——— ——— Historical and descriptive account of the. *See* **Partington**, Charles, F.

——— ——— Historical notes of the discovery and improvements of. *See* **Cook**, Frederick.

——— ——— History and progress of. *See* **Galloway**, Elijah.

——— ——— History of. *See* **Portwine**, E.

——— ——— History of, from the second century before the Christian era. *See* **History.**

——— ——— Its history and mechanism. *See* **Burn**, R. S.

——— ——— Its invention, etc. *See* **Tredgold**, T. **Steam engine, series 2.**

——— ——— Its origin and improvement. *See* **Hodge**, P. R.

——— ——— Lessons and notes on. *See* **King**, W. H.

——— ——— Manual of the. *See* **Hoblyn**, R. D.

——— ——— Manual of the. *See* **Rankine**, W. J. M.

——— ——— Manuel de l'ingénieur mécanicien constructeur de machines à vapeur. *See* **Evans**, O.

——— ——— Marine. *See* **Main**, T. J, and **Brown**, F.

——— ——— Das Nothwendige der Dampfmaschinen. *See* **Burn**, R. S. **224 Neuer Schauplatz der Künste.**

——— ——— Observations on the. *See* **Gustafsson**, G. V.

——— ——— The self-aid cyclopædia, comprising the. *See* **Burn**, Robert Scott.

——— ——— Theorie der Dampfmaschinen. *See* **Schmidt**, G.

——— ——— Theory of. *See* **Pambour**, F. M.

STEAM engine, Theory of, and rules for calculating, etc. Ed. by W. S. B. Woolhouse. *See* **Tredgold**, T. **Steam engine, series 1.**

——— ——— Treatise on the. *See* **Farey**, J.

——— ——— Treatise on the. *See* **Russell**, J. S.

——— ——— Treatise on the; its application to mines, mills, steam navigation and railways. *See* **Bourne**, J.

——— ——— Wörterbuch der Dampfmaschinenkunde. *See* **Fellmer**, R.

——— ——— Zeitung für Dampfmaschinenkunde. *See* **Voigt**, B. F.

——— engineering, American; embracing stationary, marine, river boat, screw propeller, locomotive, pumping and steam fire engines, etc. *See* **Weissenborn**, G.

——— ——— on sugar plantations, steam ships and locomotive engines. *See* **Stewart**, James.

——— ——— Report on. *See* UNITED STATES. **State dept. Reports Paris. exp. 1867. v. 4.**

——— ——— Researches in. *See* **Isherwood**, B. F.

——— engines. Dampfmaschinen und Dampfkessel. *See* **Neumann**, Friedrich. **224 Neuer Schauplatz der Künste.**

——— ——— Facts in relation to Sickels' cut off. *See* **Sickels**, F. E.

——— ——— Leur origine, etc. *See* **Trentsuk**, C. A.

——— ——— Maschinen zur Versorgung der Städte mit Wasser. *See* **Versorgung.**

——— ——— Machines à vapeur; arrêtés et instructions. *See* BELGIUM.

——— ——— Traité des machines à vapeur. *See* **Bataille**, E. M., and **Jullien**, C. E.

——— ——— Treatise on screw propellers and their. *See* **Nystrom**, J. W.

——— ——— Ueber Dampfmaschinen mit hoher Kolbengeschwindigkeit. *See* **Radinger**, J. F.

——— fire engine. *See* **Weissenborn**, G.

——— fire engines, Tests of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group ****.**

Steam for the million; an elementary treatise on the management of steam, and the principles and arrangement of the engine; with an appendix containing notes on expansive steam, station bills for steamers, etc. roy. 8°. *Philadelphia*, 1847.

Digitized by Google

STEAM hammer, A lecture on the history of the. *See* **Rowlandson**, T. S.

——— indicator and manometer. *See* **Stillman**, Paul.

——— journal, Form of. By T. Baldock. *See* **Tredgold**, T. **Steam engine, series 1.**

——— locomotion on common and paved roads. *See* **Wilder**, J.

——— machinery, Engineering precedents for. *See* **Isherwood**, B. F.

——— Nature, properties and applications of. *See* **Russell**, J. Scott.

——— Naval warfare with. *See* **Douglas**, *Sir* H.

——— navigation. American railroad journal. *See* **American.**

——— ——— Appareils à vapeur, de navigation. *See* **Ledieu**, A.

——— ——— Considérations sur l'établissement des services à vapeur sur l'océan. *See* **Fauché**, Jules.

——— ——— History of. *See* **Macfarlane**, R.

——— ——— Machinery used in. *See* **Tredgold**, T. **Steam engine, v. 2.**

——— ——— Ocean steam navigation and the ocean post. *See* **Rainey**, Thomas.

——— ——— Origin and progress of. *See* **Woodcroft**, B.

——— ——— Principles and practice of. *See* **Curr**, J.

——— ——— Progress of naval architecture; model for ocean steamers, etc. *See* **Davison**, Darius.

——— ——— Travaux de navigation. *See* **Castor**, A.

——— ——— Zeitung für Eisenbahnwesen. *See* **Voigt**, B. F.

——— Notes upon subjects connected with. *See* **Gordon**, W. Marine steam engine.

——— Ökonomische Dampferzeugung. Zahlen aus der Praxis. *See* **Fuhst**, H.

——— power. Anwendung der Dampfkraft in der Landwirthschaft. *See* **Perels**, Emil.

——— ——— on common roads. *See* **Young**, C. F. T

——— pumping machinery. Cope and Maxwell manufacturing company. Office and works, Hamilton, Ohio. 8°. *Cincinnati*, 1875. [†]

——— ships. Construction in Einrichtung der Dampfschiffe. *See* **Janvier. 98 Neuer Schauplatz der Künste.**

——— ——— Naval and mail steamers of the United States. *See* **Stuart**, C. B.

STEAM ships. On the paddles of steamers, by T. Ewbank. *See* **Tredgold**, T. **Steam engine, v. 3.**

——— ——— Treatise on. By R. Murray. *See* **Murray**, A. Ship building.

——— vessels, motion of. By P. W. Barlow. *See* **Tredgold**, T. **Steam engine series 1.**

——— ——— Treatise on. *See* **Murray**, R.

STEAMBOAT. The original steamboat supported. *See* **Fitch**, John.

STEAMBOATS. Des bateaux à vapeur; précis historique de leur invention. *See* **Jouffroy**, A. de.

——— Mémoire sur les bateaux à vapeur des États-Unis. *See* **Marestier**, J. B.

Stearns, Samuel. The American oracle; comprehending an account of recent discoveries in the arts and sciences. 8°. *New York*, 1791.

Stebbing, Henry. History of the reformation. 2 v. 16°. *London*, 1836. **Lardner's cabinet cyclopædia, v. 65, 66.**

Steedman, Charles. Manual of swimming; including bathing, plunging, diving, floating, scientific swimming, training, drowning, and rescuing. 12°. *Melbourne*, 1867.

STEEL. *See, also,* **Metallurgy.**

——— **Abridgments English Patents, No. 6.**

——— Art of increasing the strength of wrought iron and. *See* **Johnson**, W. R.

——— L'art de tremper les aciers. *See* **Camus**, M^tel.

——— Darstellung der Stahlbereitung in Frischherden. *See* **Tunner**, P.

——— Eisenhüttenkunde; Darstellung des Schmiedeeisens und Stahls. *See* **Percy**, John. Die Metallurgie, B. 2.

——— Histoire des aciéries de cémentation. Mémoire sur la fabrication des fers à acier dans le nord de l'Europe. *See* **Le Play**, M. F.

——— Management of. *See* **Ede**, G.

——— Management of. By G. Ede. *See* **Campin**, F.

——— Manufacture of. *See* **Grüner**, M. L.

——— Manufacture of. *See* **Overman**, Frederick. Manufacture of iron.

——— Papers on. *See* **Mushet**, D.

——— Report on. By W. P. Blake. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1876. v. 4.**

Digitized by Google

STEEL, Report on the mechanical properties of. By W. E. Woodbridge. *See* UNITED STATES. **War** department.

——— Stahl und Eisenwaaren. Von F. W. Haardt. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

——— Die Stahlbereitung. *See* **Tunner**, P.

——— Strength and determination of structures of steel and iron. *See* **Weyrauch**, Philip Jacob J.

——— toys and tools. l. 4°. *London. n. t. p.*

——— A treatise on. *See* **Landrin**, M. H. C.

——— The use of steel for constructive purposes. *See* **Barba**, J.

Steele, J. Dorman. Answer to the practical questions and problems contained in the fourteen weeks' courses in natural philosophy, chemistry and astronomy. 12°. *New York*, 1870.

Steele, Josua. An essay towards establishing the melody and measure of speech, to be expressed and perpetuated by peculiar symbols. 4°. *London*, 1775.

Steele, Richard. Réflexions sur l'importance de Dunkirke. État présent de Dunkirke. *n. t. p.* [Bound with: La Croix's Mécanisme des mouvements des corps flotans.]

STEERING and manœuvring vessels. **Abridgments English Patents, No. 75.**

Stegemann, M. Landwirthschaftliche Maschinen; hrsg. von. *See* **Lange**, J. C. E.

Stegmaier, Franz Joseph. Die Kaninchen und Seidenhasenzucht. 24°. *Ravensburg*, 1870. pp. 24.

Stegmann, H. Die Bedeutung der Gasfeuerung und Gasöfen für das Brennen von Porzellan, Thonwaaren, Ziegelfabrikaten, Zement, Kalk, sowie für das Schmelzen des Glases. Mit einleitenden Abhandlungen über Wärme und Verbrennung, Brennstoffe und die Theorie der Gasfeuerung. Studien und Erfahrungen von. *Illus.* 8°. *Berlin*, 1877.

Stein, W. Die Glasfabrikation. *Illus.* 8°. *Braunschweig*, 1862.

——— Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

——— Die Prüfung der Zeugfarben und Farbmaterialien, zu ihrer Erkennung und Beurtheilung. 8°. *Eutin*, 1874.

Steinhauser, —. [Verzierungen für Architectur.] *Illus.* 4°. *Berlin. n. t. p.*

Steinhauser, Anton. Geographische Unterrichtsmittel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Steinheil, — v. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH. **Polytechn.** Verein.

Steinheil, C. A. Das Chronoskop. Instrument zur Bestimmung der Zeit und der Polhöhe, ohne Rechnung. 4°. *München*, 1867.

Steinitz, Francis. The ship, its origin and progress; including the state of the navies of all nations, episodes, and lines of shipping; discoveries, colonization and commerce; with an appendix and index. *Illus.* 4°. *London*, 1849.

Steinmann, Ferdinand. Ergänzungsheft zu dem Compendium der Gasfeuerung in ihrer Anwendung auf die Hüttenindustrie. Für Fabrikanten, Ingenieure und Hüttenleute. 8°. *Freiberg*, 1869.

——— Die Luftschiffahrtskunde und ihre Anwendung zur Communication, zu Reisen und zu Gütertransporten. Nach Edm. Marey-Monge und Anderen. *Illus.* 8°. *Weimar*, 1848. **166 Neuer Schauplatz der Künste.**

Steinmetz, Andrew. A manual of weather casts, comprising prognostics on land and sea. 18°. *London*, 1866.

——— Tobacco; its history, cultivation, manufacture and adulterations; its use considered with reference to its influence on the human constitution. 8°. *London*, 1857.

Stellman, John. Day et al. vs. Stellman et al. Opinion of Judge Giles and decision on final hearing. *See* **Giles**, W. F.

Stellwag, Carl, von Carion. Treatise on the diseases of the eye, including the anatomy of the organ. Transl. from the 3d German ed., by Charles E. Hackley and D. B. St. John Roosa. roy. 8°. *New York*, 1868. [†]

STENOGRAPHY. Manuel de sténographie. *See* **Prévost**, H. **22 Manuels Roret.**

——— The short-hand standard attempted by an analysis of the circle as a foundation of a new system of. *See* **Moat**, Thomas.

——— Universal; a new system of short writing. *See* **Mavor**, W.

Digitized by Google

Stephens, *Miss.* The home book. *See* **Valentine,** *Mrs.* R.

Stephens, *Mrs.* Ann S. The ladies' complete guide to crochet fancy knitting, and needlework. obl. 8°. *New York,* 1854.

Stephens, Henry. The book of the farm. 3 v. *Illus.* 8°. *Edinburgh,* 1844.

—— Book of farm implements and machines; ed. by. *See* **Slight,** J., and **Burn,** R. S.

Stephens, Thomas. A new system of broad and small sword exercise for cavalry and infantry. 12°. *Philadelphia,* 1843.

Stephenson, George, The life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 2.**

—— Review of Smiles's life of. *See* **Hedley,** O. D.

Stephenson, Robert. Report on the atmospheric railway system. pl. 26. 4°. *London,* 1844. pp. 44.

—— Formulæ and rules for calculating the quantities in Stephenson's report. *See* **Turnbull,** W. Essay on atmospheric railway.

—— Life of. *See* **Jeaffreson,** J. C., and **Pole,** W.

—— Life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 5.**

Stephenson, Rowland Macdonald. Railways; an introductory sketch, with suggestions in reference to their extension to British colonies. *Illus.* 12°. *London,* 1850. **Weale's series, No. 62.**

STEREOCHROMY. Bereitung des Wasserglases und Stereochromie. *See* **Fuchs,** J. N. von.

STEREOSCOPE. Abhandlung über Stereoscopie. *See* **Kleffel,** L. G.

—— Description of the. *See* **Monckhoven,** D. von. **Weale's series, No. 79**.**

—— History, theory, and construction of the. *See* **Brewster,** D.

—— How to take stereoscopic pictures. *See* **Ackland,** W.

—— Jahresbericht über Stereoskopie. *See* **Kreutzer,** K. J.

—— Method of taking stereoscopic pictures. *See* **Burgess,** N. G.

—— Monographie du stéréoscope. *See* **La Blanchère,** H. de.

—— Du stéréoscope. *See* **Chevalier, C.** Méthode photographique.

STEREOSCOPE. Stereoscopic glasses for single pictures, etc. *See* **Jones,** T. W.

—— Stereoscopic pictures, Method of taking. *See* **Long,** C. A. Practical photography.

—— Das Stereoskop. *See* **Brewster,** D. **35 Neuer Schauplatz der Künste.**

Stereoscopticon. School of art. Descriptive catalogue of several hundred views of scenery, etc. 18°. *New York,* 1865. pp. 20.

STEREOSCOPY. Die interessantesten Erscheinungen der Stereoskopie. *See* **Martius-Matzdorff,** J.

—— Stereoscopic glasses for single pictures, and the physiology of stereoscopic vision. *See* **Jones,** Thomas W.

—— Zeitschrift für Stereoscopie. *See* **Zeitschrift.**

STEREOTOMY. Traité de stéréotomie. *See* **Leroy,** C. F. A.

STEREOTYPY. Histoire de la stéréotypie. *See* **Lambinet,** P.

STERLING, Rules for converting, into currency. *See* **Edelman,** George W.

—— money reduced to United States currency. *See* **McClenachan,** R.

Sternburg, Carl. Kurze Anleitung zur Photographie. 8°. *Berlin,* 1863.

Sternheim, Hermann. Populäre Gnomonik. Construction der Sonnenuhren, mit Thierkreislinien und Beleuchtungscalen. 8°. *Weimar,* 1842. **78 Neuer Schauplatz der Künste.**

STETHOSCOPIST, The young. *See* **Bowditch,** Henry J.

STETTIN. Entomologischer Verein. Linnaea entomologica. Zeitschrift, hrsg. von. 8°. *Leipzig,* 1863.

—— Entomologischer Verein. Zeitung, hrsg. von. Jahrg. 1–37, 1840–76. 8°. *Stettin,* 1840–76——.

—— Entomologischer Verein. Zeitung. Repertorium der 23 ersten Jahrg. (von 1842–62), hrsg. von M. Wahnschaffe. 8°. *Stettin,* 1862.

Steuart, James. An account of the pearl fisheries of Ceylon. 4°. *Ceylon,* 1843.

Stevens, A. The hog. *See* **Youatt,** William.

Stevens, Henry. Catalogue of my English library. 16°. *London,* 1853.

Stevens, John Austin, *jr.* Colonial records of the New York chamber of com-

Digitized by Google

Stevens, John Austin, *jr.*—Continued.
merce, 1768–1784; with historical and biographical sketches. 8°. *New York*, 1867.

Stevens, Paran. Clothing and woven fabrics, Report on. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 6.**

——— Musical instruments, Report on. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

Stevenson, Alan. Account of the Skerryvore lighthouse; notes on the illumination of lighthouses. 4°. *Edinburgh*, 1848.

——— A rudimentary treatise on the history, construction and illumination of lighthouses. *Illus.* 12°. *London*, 1850. **Weale's series, No. 47-49.**

Stevenson, David. Canal and river engineering, being the article 'Inland navigation' from the 8th ed. of the Encyclopædia Britannica. 8°. *Edinburgh*, 1858.

——— Sketch of the civil engineering of North America. 8°. *London*, 1838.

Stevenson, T. Lighthouse illumination: a description of the holophotal system, and of azimuthal-condensing and apparent lights. 8°. *London*, 1859.

Stewart, Balfour. The conservation of energy, with appendix on vital and mental application of the doctrine. 12°. *New York*, 1874. **International scientific series, v. 7.**

——— Elementary treatise on heat. 16°. *Oxford*, 1866.

Stewart, F. L. Sorghum and its products; an account of recent investigations of its value in sugar productions. New method of making sugar and refined syrup. 12°. *Philadelphia*, 1867.

Stewart, James. Steam engineering on sugar plantations, steamships and locomotive engines. 16°. *New York*, 1867.

Stewart, Robert. The American farmer's horsebook; description of diseases peculiar to the American horse, with simple, effective modes of treatment. 8°. *Cincinnati*, 1867.

Stiasny, Franz and Max. Fertige Kleider. Handschuhe. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Stieda, Ludwig. Die Bildung des Knochengewebes. Festschrift des Naturforscher-Vereins zu Riga. 4°. *Leipzig*, 1872.

Stieler, Adolf. Atlas von Deutschland, den Niederlanden, Belgien, und der Schweiz. *Gotha. n. t. p.*

Stieren, Eduard. Chemische Fabrik. Ein auf 33jährige Erfahrungen gestütztes Handbuch. 8°. *München*, 1865.

Stillé, Alfred. Elements of general pathology: a practical treatise on the causes, forms, symptoms, and results of disease. 12°. *Philadelphia*, 1848.

——— Epidemic meningitis; or cerebro-spinal meningitis. roy. 8°. *Philadelphia*, 1867.

——— Therapeutics and materia medica; a systematic treatise on the action and uses of medicinal agents, including their description and history. 3d ed. 2 v. 8°. *Philadelphia*, 1868.

Stillé, Charles J. History of the United States sanitary commission; general report of its work. roy. 8°. *Philadelphia*, 1866.

Stillman, Paul. Steam engine indicator and manometer. 12°. *New York*, 1850.

——— Steam engine indicator, and the improved manometer steam and vacuum gauges; their utility and application. New ed. 12°. *New York*, 1864.

Stilwell and Bierce manufacturing co. Eclipse, double turbine water-wheel. 8°. *Dayton, Ohio*, 1875.

Stilwell's patent lime-extracting heater and filter, combined. 8°. *Dayton, Ohio*, 1871.

Stimpson, William. List of shells of North America. **Smiths'n misc. coll., v. 2.**

——— Marine invertebrata of Grand Menan. **Smiths'n contrib., v. 6.**

Stimson, A. L. History of the express companies, and the origin of American railroads; with reminiscences of the mail-coach and baggage wagon business. 8°. *New York*, 1858.

Stingel, Johann. Apparate der chemischen Grossindustrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

Stirling, James Hutchinson. As regards protoplasm, in relation to Huxley's essay on the physical basis of life. 12°. *New Haven*, 1870. **University series, No. 3.**

Stirling, Morris. On the relative strength of common cast, and toughened cast iron; remarks made by. *See* **Owen, J.**

Digitized by Google

Stirling, Patrick James. The philosophy of trade; the theory of profits and prices; the principles that determine the relative value of coin, labour and currency. 8°. *Edinburgh*, 1846.

STOCK-breeding. Thierzucht. Von Johann Pohl. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

Stockbridge, V. D. Digest of patents relating to breech-loading and magazine small arms, except revolvers, granted in the United States from 1836 to 1873 inclusive; classified and arranged according to the movement of the principal parts for opening and closing the breech. 4°. *Washington*, 1874.

Stöckel, Heinrich Friedrich August. Die Tischlerkunst. 3te Aufl. Von Theodor Jac. Ciliax. *Illus. Weimar*, 1843. **5 Neuer Schauplatz der Künste.**

Stöckhardt, Ernst. Zeitschrift für deutsche Landwirthe; hrsg. von. *See* **Zeitschrift.**

Stöckhardt, Julius Adolph. Chemische Feldpredigten für deutsche Landwirthe. 1. Abth. 8°. *Leipzig*, 1851.

——— Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

——— The principles of chemistry; illustrated by simple experiments. Transl. from the 3d German ed. by C. H. Peirce. 8°. *Cambridge*, 1850.

Stockmarr, Alexander C. Decisions of the sewing machines cases of Potter and Wheeler vs. Wilson and Stockmarr. *See* **Nelson**, S., and **Smalley**, D. A.

Stocqueler, J. H. The military encyclopædia; a technical, biographical and historical dictionary of the military sciences, with memoirs of soldiers and narratives of battles. 8°. *London*, 1853.

Stoddard, John F. The American philosophical arithmetic. 12°. *New York*, 1853.

Stohlmann, F. A. Catalogue of surgical instruments. *See* Tiemann, George, and co.

Stohmann, F. Encyklopädie der Landwirthschaft; bearb. von. *See* **Schnee**, G. H.

——— Jahresbericht über landwirthschaftliche Pflanzenproduction; bearbeitet in Verbindung mit. *See* **Henneberg**, W.

——— and **Engler**, Carl. Handbuch der technischen Chemie; nach A. Payen's Chimie industrielle, frei bearbeitet von.

Stohmann, F.—Continued.
B. 1. Anorganische Chemie. B. 2. Organische Chemie. 8°. *Stuttgart*, 1872–74.

Stöhs, Emil. Katechismus der Bergbaukunde. *Illus.* 18°. *Wien*, 1875.

Stokes, J. The cabinet-maker and upholsterer's companion. *Illus.* 12°. *Philadelphia*, 1860.

Stölzel, J. B. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH.

STOMACH, The story of a. *See* **Story.**

Stommel, Cuno. Das Ganze der Weberei des Tuch- und Buckskinfabrikanten. [3 Bde.] B. 1. 8°. *Braunschweig*, 1876.

Stone, Abel B. A new geometrical stair builder's guide; embracing new and important principles. 2d ed. fol. *New York*, 1849.

Stone, Edmund. Construction and uses of mathematical instruments; transl. by. *See* **Bion**, N.

Stone, Thomas. The London polytechnic magazine and journal, and polytechnic review and magazine; ed. by. *See* **Polytechnic** review and magazine.

STONE, Artificial. Art de fabriquer en pierre factice. *See* **Pelouze, E. Encyclopédie populaire, v. 18.**

——— cutting. Handbuch der Steinarbeiten. *See* **Hartmann**, C. F. A. **206 Neuer Schauplatz der Künste.**

——— ——— Handbuch für Steinhauer. *See* **Matthaey**, C. **22, 23 Neuer Schauplatz der Künste.**

——— ——— La théorie et la pratique de la coupe des pierres et des bois, etc. *See* **Frezier.**

——— ——— Treatise on. *See* **Dobson**, E. **Weale's series, Nos. 25, 26.**

——— implements, weapons and ornaments of Great Britain, The ancient. *See* **Evans**, John.

——— in the bladder. Histoire de la lithotritie, etc. *See* **Leroy d'Étiolles.**

——— Lithology; or observations on stone used for building. *See* **Smith**, C. H.

——— Machines, tools. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 21.**

——— monuments, Rude. *See* **Ferguson**, James.

——— Philosopher's. *See* **Victorious** philosopher's stone.

——— ware. Steinwaaren. Von Heinrich Wolf. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 9.**

Digitized by Google

STONE working, Report on. By L. J. Hinton. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 4.**

Stonehenge, [*pseud.*] *See* **Walsh**, John Henry.

STONES, artificial, Report on. By L. J. Hinton. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 4.**

——— in the kidneys and bladder; an account of some experiments. *See* **Hales**, S.

Stoney, F. S., and **Jones**, Charles. A text book of the construction and manufacture of rifled ordnance in the British service. 2d ed. 8°. *London*, 1872.

STORAGE reservoirs, Designing and construction of. By Arthur Jacob. **Van Nostrand's science series, No. 6.** [†]

Storer, Frank H. First outlines of a dictionary of solubilities of chemical substances. 8°. *Cambridge*, 1864.

——— Qualitative chemical analysis. *See* **Eliot**, Charles W., and **Storer**, Frank H.

Storer, Horatio Robinson. On nurses and nursing; management of sick women. 16°. *Boston*, 1868.

——— and **Heard**, Franklin Fiske. Criminal abortion; its nature, evidence and law. roy. 8°. *Boston*, 1868.

STORMS. Atmospheric phenomena, meteors and aërolites. *See* **Zurcher and Margollé. Illustrated library of wonders, v. 19.**

——— On. *See* **Hopkins**, T.

——— On certain storms in Europe and America. By E. Loomis. **Smiths'n contrib., v. 11.**

——— Gewitter des Jahres 1855. Ein Beitrag zur Physiologie der Atmosphäre. *See* **Prestel**, M. A. F.

——— Handbook of the law of storms; a digest of the principal facts of revolving storms. *See* **Birt**, William Radcliff.

——— Law of storms and variable winds. *See* **Greenwood**, J. **Weale's series, Nos. 55, 56.**

——— A mechanical theory of storms; the true law of lunar influence. *See* **Bassnet**, T.

——— The philosophy of. *See* **Espy**, James P.

——— Der Sturmwarner und Wetteranzeiger. *See* **Prestel**, M. A. F.

——— their nature, classifications and laws. *See* **Blasius**, William.

Story, Joseph. Commentaries on the conflict of laws, foreign and domestic, in regard to contracts, rights and remedies, and especially in regard to marriages, divorces, wills, successions, and judgments. 8°. *Boston*, 1834. Also, 2d ed., 1841.

——— Commentaries on the constitution of the United States, with a review of the constitutional history of the colonies and states, before the adoption of the constitution. 3 v. 8°. *Boston*, 1833.

Stotherd, R. H. Notes on torpedoes, offensive and defensive. 8°. *Washington*, 1872.

Stoughton, Edwin W. Before the commissioner of patents in the matter of the application of Charles Goodyear, for the extension of letters patent, issued to him June 15th, 1844, for an improvement in India rubber fabrics; and re-issued to him, Dec. 15th, 1849, for an improvement in processes for the manufacture of India rubber. Argument of Stoughton on behalf of Charles F. Stansbury, a remonstrant against said extension. 8°. *New York*, 1858. pp. 17.

STOVES. Abrigments English Patents, No. 30.

——— Directions for making and using the thermometer stove. *See* **Arnott**, N.

——— Entwürfe zu Stubenöfen. *See* **Potzsch**, E.

——— History of base burning, or horizontal draught. *See* **Littlefield**, D. G.

——— Interference between Hagan and Groom for improvement in. *See* **Keller**, C. M.

——— Observations on garden. *See* **Whitehurst**, J.

Stövesandt, J. C. Deutliche Anweisung zur Feuerwerkerey. sm. 4°. *Leipzig*, 1757.

STRAIN of metals. Fatigue of metals under repeated strains. *See* **Spangenburg**, Ludwig. **Van Nostrand's science series, No. 23.**

Straith, Hector. Elements of gunnery; part 2, of 'Fortifications and artillery'; by. *See* **Hyde**, J. T.

STRANGULATION. Foreign bodies in the air passages. *See* **Gross**, L. D.

STRASBOURG. La société des sciences, agriculture et arts du Bas-Rhin. Nouveaux

Digitized by Google

STRASBOURG—Continued.
mémoires. T. 2, F. 2. 8°. *Strasbourg*, 1863.

Straten, Ponthos F. von der. État, progrès et avenir du drainage en France; de sa pratique et de son application dans le département de la Moselle. 8°. *Metz*, 1853.

Stratingh, S. Die Bereitung, die Verbindungen und die Anwendung des Chlors. Frei aus dem Holländischen übertragen mit Benutzung des neuesten Werkes von Chevallier, und mit Anmerkungen versehen von Cajetan Georg Kaiser. *Illus.* 8°. *Ilmenau*, 1829. **46 Neuer Schauplatz der Künste.**

Stratton, Ezra M. New York coach maker's magazine; ed. by. *See* NEW YORK (city).

Strauss, G. L. Art of photography; transl. by. *See* **Halleur,** G. C. H.

STRAW braiding. Die Strohflechtkunst. *See* **Schmied,** C. **77 Neuer Schauplatz der Künste.**

STRAWBERRY, The cultivation of. *See* **Buchanan,** Robert.

Strecker, Adolph. Das Christiania-Silurbecken; hrsg. v. *See* **Kjerulf,** Theodor.

——— Kurzes Lehrbuch der organischen Chemie. 12°. *Braunschweig*, 1853.

Street, George Edmund. Brick and marble in the middle ages. Notes of tours in the north of Italy. 2d ed. roy. 8°. *London*, 1874.

STREET architecture. *See* **Delasssaux,** Victor, and **Elliott,** John.

——— railways. Location, construction and management. *See* **Easton,** Alexander.

——— vehicles. Strassen-Fuhrwerke und andere Transportmittel. Von M. B. Rideli. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Streets, Thomas H. Contributions to the natural history of the Hawaiian and Fanning islands and Lower California, made in connection with the United States North Pacific surveying expedition, 1873-75. 8°. *Washington*, 1877. *See* UNITED STATES. **Interior dept. Nat. museum. Bulletin 7.**

Strele, Karl. Die Technik des Kolorirens und Dekorirens von ächtem und Fritten-Porzellan, Steingut, Fayence, Glas, Email, Gold, Silber, Platin, Kupfer und Mail-

Strele, Karl—Continued.
lechort, durch Bemalen, Bedrucken, Uebertragen von Photographien mit verglasbaren Email- oder Muffelfarben und Metallen, sowie das Einbrennen derselben und Poliren der Metalle. 3te Aufl. Von Brongniart's Dekoriren und Koloriren, etc., in gänzlicher Umarbeitung, mit Hinzufügung wesentlicher neuer Bestandtheile von. *Illus.* 8°. *Weimar*, 1869. **146 Neuer Schauplatz der Künste.**

——— Theorie und Praxis in der Fabrikation des weissen Feldspathporzellans, und dessen Dekorirung mit Starkfeuer-Farben. 8°. *Weimar*, 1868. **75 Neuer Schauplatz der Künste.**

STRENGTH of beams. *See* **Baker,** B.

——— of beams under transverse loads. *See* **Allen,** W. **Van Nostrand's science series, No. 19.**

——— of bridges. Die Angreifenden und widerstehenden Kräfte der Brücken und Hochbau-Constructionen. *See* **Heinzerling,** F.

——— of cast iron. *See* **Tredgold,** Thomas.

——— of materials. Festigkeitslehre, mit besonderer Rücksicht auf die Bedürfnisse des Maschinenbaues. *See* **Grashof,** F.

——— of materials, Treatise on the. *See* **Barlow,** Peter.

Strickland, William. Reports on canals, railways, roads, and other subjects. l. 4°. *Philadelphia*, 1826.

STRINGED instruments. Bau der Saiteninstrumente und deren Akustik. Entstehung und Verbesserung der Orgel. *See* **Goutershausen,** H. Welcker von. [†]

Strippelmann, Leo. Die Tiefbohrtechnik im Dienste des Bergbau's und der Eisenbahntechnik in Beziehung auf ihren Entwickelungsstandpunkt der Gegenwart, nebst praktischen Gesichtspunkten für die Wahl der den localen Verhältnissen anzupassenden Bohrmethode, in technischer und finanzieller Hinsicht. 8°. *Halle a. S.*, 1877.

Strohmayer Leopold. Heizung, Ventilation, Wasserleitungen. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 17.**

Strong, W. C. Culture of the grape. 12°. *Boston*, 1866.

Strutt, J. G. Tallis' history and description of the Crystal palace, and the exhi-

Digitized by Google

Strutt, J. G.—Continued.
bition of the world's industry in 1851. *Illus.* 3 v. 4°. *London and New York, n. d.*

Strutt, Joseph. The sports and pastimes of the people of England, from the earliest periods to the present time. 8°. *London,* 1834.

Struve, —. Art du distillateur, avec des additions; par. PARIS. **Acad. roy. des sc.; arts et métiers, v. 12.** [4° ed.]

Stuart, Charles B. The naval and mail steamers of the United States. *Illus.* 4°. *New York,* 1853.

——— The naval dry docks of the United States. *Illus.* 4°. *New York,* 1852.

Stuart, Moses. Ernesti's elements of interpretation; transl. by. *See* **Ernesti,** Johann August.

Stuart, Robert. A dictionary of architecture. [Appendix to v. 2: tables of the principal architects; a manual of architectural bibliography, and brief heads of jurisprudence.] *Illus.* 3 v. 8°. *London,* [1830].

——— Historical and descriptive anecdotes of steam engines, their inventors and improvers. 2 v. 18°. *London,* 1829.

Stubbs, George. Anatomy of the horse. fol. *London,* 1853.

Stubs, Peter. Digest of the laws of New Brunswick, relating to letters patent for new and useful inventions. *St. John, N. B.,* 1863. pp. 16.

STUCCO. Stuccaturarbeit. *See* **Hüttmann,** L. **18 Neuer Schauplatz der Künste.**

——— Die Verfertigung der Gypsfiguren und des Gypsmarmors. *See* **Schmied,** C. **165 Neuer Schauplatz der Künste.**

STUCCOS, Observations on. *See* **Pasley,** C. W.

Student (The) and intellectual observer of science, literature and art. v. 1–5. [Continued from the Intellectual observer.] 8°. *London,* 1868–71.

STUDENT, The art. *See* **Art.**

STUDS. Annales des haras et de l'agriculture. *See* **Annales.**

——— Essai sur les haras; examen méthodique des moyens propres pour établir, etc. *See* **Essai.**

Stühlen, P. Ingenieur-Kalender für Maschinen- und Hüttentechniker. 24°. *Essen,* 1871.

Stummer von Traumfels, Joseph. Practische Anleitung zum Traciren der Eisenbahnen. 8°. *Weimar,* 1867.

Sturgeon, William. The annals of electricity, magnetism and chemistry and guardian of experimental science. v. 1–10. 8°. *London,* 1837–43.

——— A course of twelve lectures on galvanism. *Illus.* v. 1. 12°. *London,* 1843.

——— Scientific researches; experimental and theoretical, in electricity, magnetism, galvanism, electro-magnetism and electro-galvanism. *Illus.* 4°. *London,* 1852.

Sturlasson, Snorre. Saga Olafs Konungs ens helga. Udförligere Sagn om Kong Olaf den hellige efter det aeldste fuldstaendige Pergaments Haandskrift i det store kongelige Bibliothek i Stockholm. Udgivet efter Foranstaltning af det Akademische Collegium ved det Kongelige Norske Frederiks Universitet. Ledsager Forelaesnings-Catalogen for andet Halvaar 1853. 8°. *Christiania,* 1853.

STUTTGART. Gewerbe-Verein. Jahres-Berichte 1–15, Jahrg. 1862–63 bis 1876–77. *Stuttgart,* 1863–77——.

——— K. Centralstelle für Gewerbe und Handel. Gewerbeblatt aus Württemberg. Hrsg. von. B. 1–18. Jahrg. 1853–75. [1870–73 missing.] 8°. *Stuttgart,* 1853–75——.

——— K. Württembergische Centralstelle für die Landwirthschaft. Wochenblatt für Land- und Forstwirthschaft. B. 1–20, Jahrg. 6–25, 1854–73. sm. 4°. *Stuttgart,* 1854–73——.

——— Württembergische Handelsgesellschaft. Exhibition of the works of industry of all nations in Paris, 1855. Kingdom of Wurttemburg. Descriptive catalogue. 8°. *Stuttgart,* 1855. pp. 48.

Styffe, Knut. Die Festigkeits-Eigenschaften von Eisen und Stahl. 8°. *Weimar,* 1870.

STYRIA. Ein treues Bild des Herzogthumes Steiermark. *See* **Hlubek,** F. X. W.

SUABIA and NEUBURG. Landwirthsch. Verein. Landwirthschaftliche Blätter für Schwaben und Neuburg. Jahrg. 1–7, 1862–68. 8°. *Augsburg,* 1862–68.

SUABIAN language. Schwäbisch-Augsburgisches Wörterbuch. *See* **Birlinger,** Anton.

SUBJECT-matter catalogue of technical journals. Sachregister der wichtigsten technischen Journale. *See* **Philipp,** D.

Digitized by Google

SUBJECT-matter index of patents for inventions, issued by the United States patent office from 1790 to 1873, inclusive. *See* UNITED STATES. **Interior dept.** Patent office.

SUBLIME (The) in nature. By Ferdinand de Lanoye. **Illustrated library of wonders, v. 12.**

SUBMARINE boats, Lecture on. By F. M. Barber. *See* UNITED STATES. **Navy dept.** Ordnance papers.

—— telegraph. The ocean telegraph cable, etc. *See* **Rowell**, W.

Subtile brains and lissom fingers. *See* **Wynter**, Andrew.

Suburban gardener and villa companion, The. *See* **Loudon**, J.

SUEZ, Isthmus of. Percement de l'isthme de Suez. *See* **Lesseps**, Ferdinand de.

SUGAR. Abridgments English Patents, No. 48.

—— and hydrometers, Reports from the secretary of the treasury of scientific investigations relating to. *See* UNITED STATES. **Treasury** department.

—— and sugar refining as practiced in the Clyde refineries. *See* **Niccol**, Robert.

—— Beet-root. *See* **Grant**, E. B.

—— —— Art de fabriquer le sucre de betteraves. *See* **Dubrunfaut.**

—— —— Die deutsche Zuckerfrage, mit besonderer Beziehung auf die Runkelzucker-Fabrikation. *See* **Schulze**, F. G.

—— —— Manufacture of. Report, by H. F. Q. D'Aligny. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

—— —— Der Rübenzuckerfabrikant. *See* **Walkhoff**, L.

—— —— Der Werth der Zuckerrübenanalyse, nebst Anleitung zu Betriebscontrole der Zuckerfabrikation. *See* **Jičínský**, Ferdinand.

—— cane, The Chinese. *See* **Hyde**, James F. C.

—— —— Cultivation and fabrication of *See* **Silliman**, B.

—— —— Cultivation in Louisiana, Cuba and the British possessions. *See* **Leon**, J. A.

—— —— Cultivation of the. *See* **Eight** practical treatises.

—— —— Papers on the culture and manufacture of East India sugar. *See* INDIA, British.

SUGAR cane. The practical sugar planter. *See* **Wray**, L.

—— colors. Fabrikation der Zucker-Couleur. *See* **Assmuss**, Edward.

—— crop made in Louisiana, Statement of. *See* **Champomier**, P. A.

—— evaporation. Eindunsten des Zuckersaftes mit heisser Luft. *See* **Leuchs**, J. C. Verdunsten.

—— —— Beiträge zur Zucker-Fabrikation, etc. *See* **Frese**, O.

—— Manufacture of. By R. S. McCulloh. *See* UNITED STATES. **Treasury** department.

—— —— Fortschritte der Zucker-Fabrikation. *See* **Scheibler**, C., and **Stammer**, K.

—— —— Handbuch der Zucker-Fabrikation. *See* **Schmidt**, C. H. **72 Neuer Schauplatz der Künste.**

—— —— Lehrbuch der Zucker-Fabrikation. *See* **Stammer**, K.

—— —— Leitfaden, zur Untersuchung der verschiedenen Zuckerarten, sowie der in der Zucker-Fabrikation vorkommenden Produkte. *See* **Mandelblüh**, Clement.

—— —— Manuel du fabricant et du raffineur de sucre. *See* **Blachette** and **Zoéga. 80 Manuels Roret.**

—— —— Stärkezuckerfabrikation. *See* **Wagner**, Ladislaus von. Stärkefabrikation. **39 Neuer Schauplatz der Künste.**

—— —— Traité complet, théorique et pratique, de la fabrication du sucre. *See* **Stammer**, Charles.

—— —— Wegweiser in der Zucker-Fabrikation. *See* **Stammer**, K.

—— —— Zucker-Apparate, etc., für Zucker-Fabriken. Von Josef Hanamann. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

—— —— Zucker-Fabrikation, aus Stärkemehl, Kartoffeln, Gummi, Papier, etc. *See* **Leuchs**, Joh. Carl.

—— —— Zucker-Fabrikation, theoretisch und praktisch dargestellt. Zweite verbesserte Auflage. *See* **Siemens**, C., and **Grothe**, H.

—— The planter's manual of. *See* **Evans**, W. J.

—— refining. Art de raffiner le sucre, par H. L. Duhamel du Monceau. *See* PARIS.

Digitized by Google

SUGAR—Continued.
Acad. roy. des sc.; arts et métiers, v. 40; also v. 15.
——— testing. Polarisationsdifferenzen beim Rohzuckerhandel. *See* **Wackenroder**, B.
——— trade, Candid and impartial considerations on the nature of the. *See* **Candid.**
——— Treatise on. *See* **Moseley**, Benjamin.
——— Treatise on sugar machinery. *See* **Burgh**, N. P.
——— Treatise on the art of boiling. *See* **Weatherly**, Henry.
Suggestions for a domestic currency founded upon philosophical principles; preceded by a few thoughts on the economy of order and industry, the harmony of which becomes permanent only by an equitable measure of exchange. 8°. *New York*, 1847.
Sullivan, James. Treatise on the cultivation of the sugar cane. *See* **Eight** practical treatises.
Sullivan, William K. The journal of industrial progress. Nos. 1-15. 8°. *Dublin*, 1854-55.
——— Resources of Ireland. *See* **Sproule**, J.
Sullivant, William S. Botany of the northern United States. Mosses and liverworts. *See* **Gray**, Asa.
SULPHURIC acid. Beiträge zur Theorie und Praxis der Schwefelsäure Fabrikation. *See* **Bode**, F.
Sumichrast, Francis E. Birds of Southwestern Mexico; collected by. *See* UNITED STATES. **Interior dept. Nat. museum. Bulletin 4.**
SUN, The. *See* **Science lectures for the people, series 2.**
——— The. By A. Guillemin. **Illustrated library of wonders, v. 3.**
SUN-dial. Explicatio horologii in Horto-Regio Londini. *See* **Hallus**, Franciscus, *alias* Linus.
SUNDERLAND, Wet dock and other works at. By J. Murray. **Weale's papers on engineering, v. 5.**
SUPERIOR fishing; or the bass of the northern states. An account of a sporting visit to Lake Superior. *See* **Roosevelt**, Robert B.
SUPERSTITION and force. *See* **Lea**, Henry C.
SUPERSTRUCTURES. Die neuesten Oberbau-Constructionen. *See* **Heusinger von Waldegg**, Edmund.
Surenne, Gabriel. Spiers and Surenne's French and English dictionary. *See* **Spiers**, A.
SURGEON general's office, Catalogue of the library of. *See* UNITED STATES. **War** department.
SURGERY. Abridgments English Patents, No. 25.
——— British and foreign medico-chirurgical review. *See* **British.**
——— Chirurgische Mechanik. *See* **Goldschmidt**, S.
——— Clinical lectures on. *See* **Nélaton**, M.
——— Conservative. *See* **Davis**, Henry G.
——— Dictionary of practical surgery, etc. *See* **Cooper**, Samuel.
——— The first lines of the practice of. *See* **Cooper**, Samuel.
——— Handbook of surgical operations. *See* **Smith**, Stephen.
——— Homeopathic practice of. *See* **Hill**, B. L., and **Hunt**, James G.
——— Institutes and practice of. *See* **Gibson**, William.
——— Instruments and apparatus of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 24.**
——— Instruments and apparatus of. Report, by T. W. Evans. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**
——— Lectures on. *See* **Smith**, Henry H.
——— Lectures on orthopædic. *See* **Bauer**, Louis.
——— Manual of the principles of surgery for students. *See* **Canniff**, William.
——— Manuel de chirurgie domestique. *See* **2 Manuels Roret.**
——— Minor. *See* **Packard**, John H.
——— ——— *See* **Sargent**, F. W.
——— ——— *See* **Smith**, Henry H.
——— of the mouth, jaws and associated parts. *See* **Garretson**, James E.
——— New elements of. *See* **Velpeau**, Alf. A. L. M.
——— Nouveaux éléments de médecine opératoire, etc. *See* **Velpeau**, Alf. A. L. M.
——— Operative. *See* **Smith**, Henry H.
——— A practical system of. *See* **Fergusson**, William.
——— The practice of. *See* **Miller**, James.
——— The practice of, and the application of dressings. *See* **Hastings**, John.

Digitized by Google

SURGERY, The practice of; its adaptation to the homœopathic practice. *See* **Helmuth**, William T.
—— The principles and practice of. *See* **Pirrie**, Wm.
—— The principles of, etc. *See* **Bell**, John.
—— Remarkable cases in. *See* **Eve**, Paul F.
—— Report on. By A. Ruppaner. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**
—— Selected specimens from surgical section of army medical museum, exhibited at Philadelphia, 1876. *See* UNITED STATES. **War department.**
—— Surgical cases treated in the army of the United States from 1865 to 1871, Report on. *See* UNITED STATES. **War dept. Surgeon general's office, circular 3.**
—— Surgical history of the war of the rebellion. *See* UNITED STATES. **War dept.** Surgeon general's office.
—— Surgical observations, with cases and operations. *See* **Warren**, J. Mason.
—— A system of. *See* **Gross**, S. D.
—— A treatise on military surgery and hygiene. *See* **Hamilton**, Frank Hastings.
SURGICAL instruments. Akiurgische Abbildungen. *See* **Blasius**, E.
—— —— Catalogue of. *See* **Tiemann**, George.
—— —— Chirurgische Instrumente. Von Mosetig v. Moorhof. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**
—— —— Magazyn ofte wapenhuys der chirurgyns. *See* **Scultetus**, J.
—— —— Sammlung von chirurgischen Instrumenten. *See* **Seerig**, A. W. H.
SURVEYING and navigation. *See* **Robinson**, Horatio N.
—— Dictionary of terms used in. By J. Weale. **Weale's series, Nos. 36-39.**
—— Elemente der Vermessungskunde. *See* **Bauernfeind**, C. M.
—— Elements of. *See* **Davies**, C.
—— Engineering field notes on. *See* **Castle**, H. J.
—— Engineering field work applied to. *See* **Haskoll**, W. D.
—— Höhere Markscheidekunst. *See* **Miller-Hauenfels**, Albert von.
—— Die Instrumente und Werkzeuge der höheren und niederen Messkunst, etc. *See* **Schneitler**, C. F.
SURVEYING instruments, Catalogue of. *See* Casella, L. P.
—— Lehrbuch der gesammten Messkunst. *See* **Schneitler**, C. F.
—— Manuel d'arpentage. *See* **Lacroix**, S. F. T. 1. **42 Manuels Roret.**
—— Manuel supplémentaire d'arpentage. *See* **Hogard**, *and* **Hogard**, Henri. T. 2. **42 Manuels Roret.**
—— On the use of the barometer in surveys. *See* **Williamson**, R. S.
—— Tables useful in. *See* UNITED STATES. **War department.**
—— Traité d'arpentage. *See* **Leclerc**, J., and **Toussaint**, J. **Bibliothèque rurale, 2e série, No. 14.**
—— Treatise on land. *See* **Gillespie**, W. M.
SURVEYOR'S guide. *See* **Duncan**, Andrew.
SURVEYS. Reconnaissance of Northwestern Wyoming. *See* UNITED STATES. **War department.**
Süs, Fr. Wilhelm. Das Handlungshaus Ferdinand Flinsch. Gedenkbuch zu dessen fünfzigjähriger Jubelfeier am 20. April 1869. Hrsg. von. 4°. *Frankfurt am Main*, 1869.
SUSPENSION bridges, Cable-making for. *See* **Hildenbrand**, Wilhelm. **Van Nostrand's science series, No. 32.**
Susse, *frères*. Observations sur le daguerréotype. *See* **Daguerre**, Louis J. M.
Sutherland, William. The grainer, marbler, and sign writer's assistant, also sign-writing and gilding on glass. 16°. 1854. pp. 27.
Sutherlin, George S. The lumber dealer's assistant; complete tables of the measurement of timber. 18°. *Richmond*, 1849.
Sutton, Francis. A systematic handbook of volumetric analysis; the quantitative estimation of chemical substances by measure. 8°. *London*, 1863.
Sutton, Samuel. An historical account of a new method for extracting the foul air out of ships, with description and draught of the machines. 8°. *London*, 1745. pp. 48.
Sutton, Thomas. The calotype process; handbook to photography on paper. 8°. *London*, 1855.
—— The collodion processes; wet and dry. 8°. *London*, 1862.

Digitized by Google

Sutton, Thomas. A description of certain instantaneous dry collodion processes; also a new set of apparatus for preparing dry plates. 8°. *London*, 1864.

——— A novelty in art; consisting of a new method of painting in oil colors on paper, by means of transparent washes, producing the same effect as in water-color painting; with the advantages of greater permanency and facility of execution. 12°. *London*, 1867. pp. 27.

——— Photographic notes; ed. by. *See* **Photographic.**

——— Photography in printing ink; being a description of the process recently patented by John Pouncy, of Dorchester. 8°. *London*, 1863.

——— A treatise on the positive co lodion process. 8°. *London*, 1857.

——— and **Blanquart-Evrard.** Prospectus of the establishment for permanent photographic printing; conducted by. obl. 4°. *St. Bulade's Bay, Jersey*, 1855.

——— and **Dawson,** George. A dictionary of photography. *Illus.* 8°. *London*, 1867.

——— and **Worden,** John. A dictionary of photography. The chemical articles, A, B, C, by Worden. *Illus.* 8°. *London*, 1858.

Swainson, William. Animals in menageries. 16°. *London*, [1833]. **Lardner's cabinet cyclopædia, v. 114.**

——— Encyclopædia of geography, zoology, etc.; by. *See* **Murray,** N.

——— Natural history and classification of birds. 2 v. 16°. *London*, 1836. **Lardner's cabinet cyclopædia, v. 116.**

——— Natural history of fishes, amphibians, and reptiles, or monocardian animals. 2 v. 16°. *London*, 1838–39. **Lardner's cabinet cyclopædia, v. 117, 118.**

——— On the habits and instincts of animals. 16°. *London*, [1835]. **Lardner's cabinet cyclopædia, v. 121.**

——— On the natural history and classification of quadrupeds. New ed. 16°. *London*, 1845. **Lardner's cabinet cyclopædia, v. 113.**

——— A preliminary discourse on the study of natural history. 16°. *London*, 1834. **Lardner's cabinet cyclopædia, v. 111.**

——— Taxidermy. With the biography of zoologists and notices of their works.

Swainson, William—Continued.

16°. *London*, 1840. **Lardner's cabinet cyclopædia, v. 122.**

——— A treatise on the geography and classification of animals. 16°. *London*, 1835, **Lardner's cabinet cyclopædia, v. 112.**

Swan, Abraham. The British architect. or the builders' treasury of staircases, arches, doors, windows, chimney-pieces, shields and trussed roofs. fol. *London, n. d.*

——— Designs in carpentry, containing domes, trussed roofs flooring, trussing of beams, angle brackets and cornices. 4°. *London*, 1759.

Swan, Joseph R. Commentaries on pleading under the Ohio code; with precedents of petitions, answers, demurrers, and replies. 8°. *Cincinnati*, 1861. [?]

SWEDEN, History of. *See* **Dunham, S. A. Lardner's cabinet cyclopædia, v. 57-59.**

SWEDISH language. A new pocket dictionary of English and Swedish languages. *See* **New.**

——— Tidskrift för Svenska Landt-Bruket och dess Binäringar. *See* **Bergelin,** J. Theod.

Swedenborg, Emanuel. Angelic wisdom concerning divine providence. Transl. from the Latin. 8°. *New York*, 1873.

——— Angelic wisdom concerning the divine love and divine wisdom. Transl. from the Latin. 8°. *New York*, 1872.

——— The Apocalypse revealed, and the arcana disclosed which have hitherto remained concealed. Transl. from the Latin. 2 v. 8°. *New York*, 1873.

——— Arcana cœlestia; the heavenly arcana contained in the Holy Scriptures or word of the Lord unfolded. Transl. from the Latin. 10 v. 8°. *New York*, 1870–73.

——— Conjugial love and its chaste delights; also, adulterous love and its sinful pleasures. 8°. *New York*, 1871.

——— The four leading doctrines of the new church, signified by the New Jerusalem in the Revelation; being those concerning the Lord, the Sacred Scriptures, faith and life. 8°. *New York*, 1873.

——— Heaven and its wonders. The world of spirits and hell, from things heard and

Digitized by Google

Swedenborg, Emanuel—Continued.
seen. Transl. from the Latin, by S. Noble. 8°. *New York*, 1872.
——— The New Jerusalem and its heavenly doctrine, according to what has been heard from heaven. To which is prefixed, information respecting the new heaven and the new earth. Transl. from the Latin. 8°. *New York*, 1873.
——— Some specimens of a work on the principles of chemistry, with other treatises. Transl. from the Latin, by Charles Edward Strutt. 8°. *London*, 1847.
——— Traité du fer, par. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 6.**
——— The true Christian religion, containing the universal theology of the new church. Transl. from the Latin. 8°. *New York*, 1873.

SWEEPING. Abridgments English Patents, No. 57.

Sweet, T. D. J. Ready reckoner; the values of articles by the pound, ounce, barrel and yard; from 1-1000 lbs.; from $\frac{1}{16}$ of a ct. to one dollar. 16°. *New York*, 1868.

Sweetland, J. B. Wide awake; or, an eye behind the scenes. Handbook of instructions in the art of selling patent rights. 24°. *Pontiac, Mich.*, 1869.

Sweetser, William. Mental hygiene, or an examination of the intellect and passions; designed to show how they affect and are affected by the bodily functions, and their influence on health and longevity. 2d ed. 8°. *New York*, 1850.

Swett, John A. A treatise on the diseases of the chest; being a course of lectures delivered at the New York hospital. 8°. *New York*, 1852.

Swift, John Franklin. Going to Jericho; or sketches of travel in Spain and the East. 12°. *New York*, 1868.

Swift, Lionel. Manual of the hydrometer, containing its history, philosophy, mode of graduating scale, application to technical and general purposes, with rules, worked examples and complete tables. 8°. *Portsmouth*, 1870.

SWIMMING, Manual of. *See* **Steedman,** Charles.

Swindell, John George. Rudimentary treatise on well-digging, boring, and pump-work. 2d ed. rev. by G. R. Burnell. *Illus.* 12°. *London*, 1851. **Weale's series, No. 31.**

SWINE breeder, The American. *See* **Ellsworth,** Henry W.
——— Éducation des porcs. *See* **Mortillet,** Paul de.

Swinton, William. Rambles among words, their poetry, history and wisdom. 12°. *New York*, 1864.

SWISS absinthe, Manufacture of. *See* **Duplais,** *aîné et jeune.* Manufacture and distillation of alcoholic liquors.

SWITCHES. Geometrische Construction von Weichen-Anlagen für Eisenbahn-Gleise. *See* **Pinzger,** L.

Switzer, Stephen. An introduction to a general system of hydrostaticks and hydraulicks. *Illus.* 4°. *London*, 1729.

SWITZERLAND. Bericht an den Bundesrath über die wegen der Insurrektion in Neuenburg Verhafteten. Vom 29. Herbstmonat 1856. 8°. pp. 11. *n. t. p.*
——— Bericht der eidgenössischen Kommissäre, in Kanton Neuenburg an den Schweizerischen Bundesrath. Vom 20. Sep. 1856. 8°. pp. 42. *n. t. p.*
——— Botschaft des Bundesrathes an die hohe Bundesversammlung in der Neuenburger Angelegenheit. Vom 13. Jan. 1857. 8°. pp. 22. *n. t. p.*
——— History of. *See* **History. Lardner's cabinet cyclopædia, v. 22.**
——— Message du conseil fédéral à la haute assemblée fédérale, concernant la question neuchâteloise. 13 jan. 1857. 8°. pp. 18. *n. t. p.*
——— Rapports au conseil fédéral suisse, concernant les Neuchâtelois détenus pour cause d'insurrection. 29 sep. 1856. 8°. pp. 10. *n. t. p.*
——— Rapporto della maggioranza della commissione del consiglio degli stati sulla quistione di Neuchatel. Del 16 gennajo 1857. 8°. pp. 10. *n. t. p.*
——— Rapporto del Dr. Escher per l'affare di Neuchatel. *See* **Escher.**
——— Verhandlungen der Schweizerischen naturforschenden Gesellschaft. Versammlung 36te–58te [50 missing], 1851–1875——. 8°. [Published in the various cities of Switzerland; some volumes in German, some French, and some in Italian.]

Digitized by Google

SWITZERLAND. Vortrag des Dr. Escher in der Neuenburgerfrage. *See* **Escher**, *Dr.*

SWORD-cutler. Manuel du fourbisseur. *See* **Desormeaux**, A. O. Paulin. **106 Manuels Roret.**

——— exercise, Broad and small. *See* **Stephens**, Thomas.

SYLVA, The North American. *See* **Michaux**, F. Andrew.

——— The North American. *See* **Nuttall**, Thomas.

——— sylvarum; or, natural history, and an epitome of the 'Novum organon'. *See* **Bacon**, Francis.

Syme, Patrick. Werner's Nomenclature of colours. *See* **Werner**, A. G.

Symonds, *Sir* W. The 'Cyclops'. *See* **Tredgold**, T. Steam navigation. Appendices E and F.

Symons, William. The practical gager; rules for gaging and fixing the utensils of victuallers, brewers, distillers and maltsters. 16°. *London*, 1819.

SYMPIESOMETER, Description of the. *See* **Adie**, A.

SYNONYMES, A dictionary of English. *See* **Soule**, Richard.

——— Dictionary of synonymical terms of the English language. *See* **Rawson**, J. [†]

——— English. *See* **Crabb**, George.

——— ——— *See* **Graham**, G. F.

——— A selection of English. *See* **Whately**, Richard.

SYPHILIS. Gonorrhœa, etc. *See* **Berjean**, J. Ph.

SYPHILITIC disease, Illustrations of. *See* **Ricord**, Philip.

SYRUPS. Manufacture and distillation of alcoholic liquors. *See* **Duplais**, *aîné et jeune.*

System (A) of instruction in the practical use of the blowpipe; being a graduated course of analysis for the use of students, and all those engaged in the examination of metallic combinations. 12°. *New York*, 1858.

——— of the world. *See* **Nichol**, J. P.

Szabó, József. Abhandlungen des ungarischen naturwissenschaftlichen Vereins; red. v. *See* PESTH.

——— Természettudomanyi társulat ėkönyvei; Szerkeszté. *See* PESTH.

——— Természettudományi társulat évi jeleutíse. 1860-61. Szerkeszté. *See* PESTH.

Szabó, József. Természettudomanyi társulat köslonye; Szerkeszté. *See* PESTH.

TABLES. Analytische Tabelle mit den natürlichen Farben der Niederschläge. *See* **Kubert**, Ferdinand.

——— and formulæ. Des Ingenieurs Taschenbuch. *See* BERLIN. **Verein** "die Hütte". [†]

——— and formulæ useful in surveying, etc. *See* UNITED STATES. **War** department.

——— and information appertaining to the use of wrought iron. *See* **Haumann**, A. G.

——— and tracts relative to several arts and sciences. *See* **Ferguson**, James.

——— calculated, stereomoulded, and printed by machinery. *See* **Specimens.**

——— Exchange tables of British sterling. *See* **Folger**, Robert M.

——— Merchants and iron trades' guide, etc. *See* **Hogg**, Joseph.

——— The model calculator for the engineer, mechanic, etc. *See* **Byrne**, Oliver.

——— of all measures of capacity used within the dominions of the British empire. *See* **Gutteridge**, William.

——— of excavations and embankments. *See* **Lyon**, Patrick.

——— of excavations and embankments. *See* **Morrison**, William H.

——— of French exchange. *See* **Price**, Joseph M.

——— of French measures; metres reduced to yards; annes reduced to yards. 12°. *New York*, 1832.

——— Sammlung mathematischer Tafeln. *See* **Vega**, Georg von.

——— showing the value of British sterling. *See* **McMullen**, Lewis.

——— Tafeln über Gegenstände der Geometrie. *See* **Bauernfeind**, C. M.

——— Time and traverse. By R. Oliver. *See* **Tredgold**, T. **Steam engine, series 1.**

——— Useful. *See* **Noble**. W. H.

——— Useful rules and. *See* **Rankine**, William J. M.

——— The works of Edmund Gunter; with a canon of artificial sines and tangents, and logarithms. *See* **Gunter**, Edmund.

——— Der Zeitmessknecht. *See* **Pressler**, M. R.

TACHYGRAPHY, Elements of. *See* **Lindsley**, David Philip.

TACTICS, Infantry. *See* **Casey**, Silas.

Digitized by Google

Taft, J. A practical treatise on operative dentistry. 2d ed. 8°. *Philadelphia*, 1868.

Taillard, Ernest. Exposition universelle de Paris, de 1867. Chemins de fer; les locomotives, et le matériel de transport. Examen des divers systèmes appliqués en Europe et en Amérique. T. 1r, texte; 2e, atlas. 8°. *Paris*, 1867.

TAILORING. Art du tailleur. Par F. A. P. de Garsault. *See* PARIS. **Acad. des sc.; arts et métiers, v. 31, also v. 14.**

——— Die Kleidermacherkunst. *See* **Heyder, Fr. 9 Neuer Schauplatz der Künste.**

——— Lehre der Mannsschneiderei. *See* **Diete, H. 121 Neuer Schauplatz der Künste.**

——— Manuel du tailleur. *See* **Vandael, —. 86 Manuels Roret.**

——— The tailor's philosophy. *See* **Walker, W. E.**

Tait, P. G. An elementary treatise on quaternions. 8°. *Oxford*, 1867.

——— Lectures on some recent advances in physical science. 8°. *London*, 1876.

——— Sketch of thermo-dynamics. 8°. *Edinburgh*, 1868.

Talbot, Gerald F. Analysis of the organization of the Prussian army. 8°. *London*, 1871.

Talcott, Sylvester, et al. McCormick vs. Talcott et al. Appeal. *See* **McCormick, C. H.**

Talcott, Waite, et al. McCormick vs. Talcott et al. Appeal. *See* **McCormick, C. H.**

Tallis, John. History and description of the Crystal palace and the exhibition of 1851. *See* **Strutt, J. G.**

TALLOW chandler. Art du chandelier. Par H. L. Duhamel du Monceau. *See* PARIS. **Acad. des sc.; arts et métiers, v. 39, also v. 6.**

Tambroni, Giuseppe. Treatise on painting; introduction and notes by. *See* **Cennini, C.**

Tamoney, Patrick. The art of dyeing simplified. 12°. *Mountain Valley, Va.*, 1852. pp. 32.

Taney, Roger Brooke, Life of. *See* **Tyler, Samuel.**

TANGENCIES of circles and spheres. By B. Alvord. **Smiths'n contrib., v. 8.**

Tanner, Henry S. An accompaniment to Tanner's universal atlas; comprising statistics of the United States, and also of the other principal empires, kingdoms and states of the world. 8°. *Philadelphia*, 1843.

TANNING and currying leather. *See* **McBride,** David.

——— Art du tanneur. Par J. J. Le F. de la Lande. *See* PARIS. **Acad. des sc.; arts et métiers, v. 38, also v. 3.**

——— currying and leather dressing. *See* **Dussauce, H.**

——— currying and leather dressing. *See* **Julia de Fontenelle, J. S. E., and Malepeyre, F.**

——— Fabrikation des Lohgaren Leders in Deutschland. *See* **Günther, F. A. 282 Neuer Schauplatz der Künste**

——— Handbuch der Lohgerberei. *See* **Schmidt, C. H. 110 Neuer Schauplatz der Künste.**

——— Herstellung der Leder. *See* **Lietzmann, J. C. H.**

——— Lohgerberei. *See* **Knoderer, Carl. 234 Neuer Schauplatz der Künste.**

——— Manuel du tanneur, du corroyeur et de l'hongroyeur. *See* **Chicoineau, *Mme.* 118 Manuels Roret.**

——— Neues Journal der Gerberei. *See* **Voigt, B. F.**

——— Treatise on. *See* **Richardson, W. H., *jr.*** Boot and shoe manufacturers' assistant.

Tanquerel des Planches, L. Lead diseases; a treatise from the French of. With notes and additions on the use of the lead pipe and its substitute; by Samuel L. Dana. roy. 8°. *Lowell*, 1848.

TAPESTRY. Account of ancient historical tapestries. *See* **Owen, *Mrs.* H.**

——— Tapeten- und Buntpapier-Industrie. *See* **Exner, W. F. 25 Neuer Schauplatz der Künste.**

Tarbé, M. Nouveau manuel complet des poids et mesures, des monnaies, du calcul décimal et de la vérification. Nouvelle éd. 24°. *Paris*, 1845.

Tarbé des Sablons. Manuel des poids et mesures; rev. par. **109 Manuels Roret.**

Tardieu, Ambroise. Treatise on epidemic cholera; being lectures delivered under the authority of the faculty of medicine, of Paris. Transl. from the French by Samuel L. Bigelow. 12°. *Boston*, 1849.

Digitized by Google

TARIFF. French and American tariffs compared. *See* **Carey,** Henry C.

——— laws from 1789 to 1833. *See* UNITED STATES. **Congress.**

——— Report on comparative tariffs. *See* UNITED STATES. **State** department.

——— Die Zolltarife aller Länder. *See* **Hübner,** Otto.

TARTARY, Thibet and China, A journey through. *See* **Huc,** E.

TASMANIA, Industrial products of, Crystal palace, Sydenham. 8°. *Hobart Town,* 1859. [†]

——— Royal society of. *See* HOBART TOWN.

——— Tasmanian contributions to the exhibition, 1855. fol. *Hobart Town,* 1856.

TASTE. Physiologie du goût. *See* **Physiologie.**

Tate, A. Norman. Petroleum and its products; an account of the history, origin, composition, properties, uses, and commercial value of petroleum; the methods employed in refining it, and the properties of its products. 12°. *London,* 1863.

Tate, Benjamin. The American form book; containing legally approved precedents for agreements, arbitrations, assignments, bonds, bills of exchange, promissory notes, letters of attorney, etc. New and rev. ed. 8°. *Richmond, Va.,* 1847.

Tate, James S. Surcharged and different forms of retaining walls. *Illus.* 18°. *New York,* 1873. **Van Nostrand's science series, No. 7.**

Tate, Thomas. The principles of mechanical philosophy applied to industrial mechanics. 8°. *London,* 1853.

TATTING, Book of. *See* **Lady's** library.

Tauberth, V. Civilingenieur; hrsg. von. *See* **Civilingenieur.**

TAUNUS railway. By R. Thorman. **Weale's papers on engineering, v. 5.**

TAX system of the United States. *See* **Boutwell,** George L. [†] App.

TAXATION. How it is raised and expended. *See* **Levi,** Leone.

——— De la réforme des impôts en Belgique, comme moyen de soulager le paupérisme. *See* **Heuschling,** X.

——— De l'impôt sur le revenu. *See* **Heuschling,** X.

——— Des impôts dans leur rapport avec l'agriculture. *See* **Heuschling,** X.

——— its levy and expenditure. *See* **Peto,** S. Morton.

TAXIDERMY. Dermoplastik und Museologie. *See* **Martin,** Philipp Leopold.

——— Taxidermie, oder die Lehre vom Konserviren, etc. *See* **Martin,** Philipp Leopold.

——— with the biography of zoologists. *See* **Swainson,** W. **Lardner's cabinet cyclopædia, v. 122.**

Taylor, Alfred Swaine. Manual of chemistry. *See* **Brande,** William T.

——— A manual of medical jurisprudence; with notes and references to American decisions, by Clement B. Penrose. 6th Amer. from 8th London ed. 8°. *Philadelphia,* 1866.

——— On poisons in relation to medical jurisprudence and medicine. Edited, with notes, by R. E. Griffith. 8°. *Philadelphia,* 1848.

Taylor, Charles. Useful geometry, exemplified by diagrams; with concise directions showing the construction, division, inscribing, circumscribing, and proportions of plane figures. 18°. *London,* 1832.

Taylor, Charles Fayette. Theory and practice of the movement cure; or, the treatment of lateral curvature of the spine, paralysis, indigestion, constipation, consumption, angular curvatures, and other deformities; diseases incident to women, derangement of the nervous system; and other chronic affections, by the Swedish system of localized movements. *Illus.* 12°. *Philadelphia,* 1861.

Taylor, Daniel C. The freighters and shippers' ready reckoner, and forwarder's assistant: or tables showing at a glance the amount of freight on any given number of pounds. roy. 8°. *New York,* 1867.

Taylor, George. The indications of the Creator, or the natural evidences of final cause. 12°. *New York,* 1851.

Taylor, George H. An illustrated sketch of the movement cure, its principles, methods and effects. 12°. *New York,* 1866.

Taylor, Henry. The bee-keeper's manual; or practical hints on the management and complete preservation of the honey bee. 3d ed. *Illus.* 16°. *London,* [1846].

Taylor, J. Traill. The British journal photographic almanac, etc. *See* **British** journal.

Taylor, John. Records of mining; ed. by. Part 1. 4°. *London,* 1829.

Digitized by Google

Taylor, Joseph. The complete weather guide, a collection of practical observations for prognosticating the weather; including the Shepherd of Banbury's rules. 18°. *London*, 1814.

Taylor, Richard. Philosophical magazine: ed by. *See* **Philosophical.**

——— Scientific memoirs, selected from the transactions of foreign academies of science and learned societies, and from foreign journals; ed. by. v. 2, 3. 8°. *London*, 1841–43. [v. 1 wanting.]

Taylor, Richard Cowling. Statistics of coal. The geographical and geological distribution of mineral combustibles or fossil fuel, including also notices on localities of the various bituminous substances employed in arts and manufactures. 8°. *Philadelphia*, 1848.

——— Two reports on the coal lands, mines and improvements of the Dauphin and Susquehanna coal company. 8°. *Philadelphia*, 1840.

Taylor, W. B. Sparsfield. The origin, progress and present condition of the fine arts in Great Britain and Ireland. 2 v. 8°. *London*, 1841.

TEA culture in India. *See* **Fortune,** R.

——— A discourse on. *See* **Tsiology.**

——— A journey to the tea countries of China, with a notice of the East India co.'s tea plantations in the Himalaya mountains. *See* **Fortune,** R.

——— Monographie du thé. *See* **Houssaye, J. C.**

——— plant, The cultivation of, in the United States of America. *See* **Smith, Junius.**

TEACHER and parent, The. *See* **North-end,** Charles.

——— Papers for the. *See* **Barnard,** Henry.

TEACHERS' institute, The. *See* **Fowle,** William B.

TEACHING a science; the teacher an artist. *See* **Hall,** Baynard R.

——— Unterrich'swesen. Migerka. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 11.**

——— the young to read, The true philosophy of. *See* **Tefft,** John Dickinson.

TECHNICAL chemistry. Handwörterbuch der technischen Chemie. *See* **Böttger,** Rud., und **Gräger,** R.

Technisches Taschen-Wörterbuch, für Industrie und Handel. 3 Bde. 12°. *Wiesbaden, n. d.*

Technologist (The), a monthly record of science applied to art, manufacture and culture. Ed. by Peter Lund Simmonds. v. 1–6 8°. *London*, 1861–66. [v. 1 is entitled: 'applied to art and manufacture.' v. 2, imperfect.]

——— (The), devoted to engineering, manufacturing and building. v. 1, and 9 nos. of v. 2. fol. *New York*, 1870–71.

Technologiste (Le); ou archives des progrès de l'industrie française et étrangère. Rédigé par une société de savants, publié sous la direction de M. F. Malepeyre. T. 1–36. 8°. *Paris*, 1840–76———.

TECHNOLOGY. Annales de l'industrie, ou Mercure technologique. *See* **Le Normand,** L. S., and **Moléon,** J. G. V. de.

——— Dictionnaire technologique. *See* **Dictionnaire.**

——— Elements of. *See* **Bigelow,** Jacob.

——— French and English terms in engineering. *See* **Flachat,** E., and **Petiet,** J. Guide to the locomotive engine.

——— Geschichte der Technologie seit der Mitte des achtzehnten Jahrhunderts. *See* **Karmarsch,** Karl.

——— Grundriss der chemischen Technologie. *See* **Post,** Julius.

——— Handbuch der mechanischen Technologie. *See* **Karmarsch,** Karl.

——— Handbuch der Technologie. *See* **Bernoulli,** C.

——— Handwörterbuch der Technologie. *See* **Schöpffer,** C.

——— Jahrbuch über die Erfindungen und Fortschritte auf dem Gebiete der Maschinentechnik und mechanischen Technologie. *See* **Neumann,** Friedrich.

——— Jahresbericht über die Technologie. *See* **Grothe,** H.

——— Physikalische Technik. *See* **Frick, J.**

——— Polytechnisches Wörterbuch. *See* **Leuchs,** J. C.

——— Repertorium der technischen Literatur. *See* PRUSSIA. **K. Ministerium für Handel.**

——— Sachregister der wichtigsten technischen Journale. *See* **Philipp,** D.

——— Sammlung technischer Hülfsmittel. *See* **Rossler,** H.

——— Technical repository. *See* **Gill,** Thomas.

Digitized by Google

TECHNOLOGY. Technische Blätter. *See* PRAGUE.
—— Technisches Taschen-Wörterbuch, für Industrie und Handel. *See* **Technisches**.
—— Technisches Wörterbuch. *See* **Karmarsch**, K., and **Heeren**, F.
—— Technological dictionary. *See* **Buchanan**, W. M.
—— Technological dictionary; English, German, French. *See* **Tolhausen**.
—— Technologische Encyklopädie. *See* **Prechtl**, Johann Josef.
—— Technologische Terminologie. *See* **Kessels**, H.
—— Technologisches Skizzenbuch. *See* **Schmidt**, Carl H.
—— Technologisches Wörterbuch der deutschen, französischen und englischen Sprache. *See* **Beil**, J. A.
—— The technologist. *See* **Technologist**.
—— Le technologiste. *See* **Technologiste**.
—— Universal technological dictionary. *See* **Crabb**, G.

TEETH. *See, also,* **Dental** *and* **Dentistry**.
—— Anatomy and physiology of. *See* **Jobson**, David Wemyss. **American library of dental science, v. 6.**
—— and gums, Disorders and deformities of. *See* **Berdmore**, Thomas. **American library of dental science, v. 7.**
—— artificial. *See* **Bean**, James B. [†] App.
—— —— Observations on. *See* **Jobson**, David Wemyss. **American library of dental science, v. 6.**
—— Critical inquiry into a few facts connected with the teeth. *See* **Waite**, George. **American library of dental science, v. 7.**
—— Digestion and the. *See* **Nisbet**, Andrew.
—— Diseases of the. *See* **Hunter**, John. **American library of dental science, v. 1.**
—— in man and various animals, An essay on the structure and formation of. *See* **Blake**, Robert. **American library of dental science, v. 9.**
—— Manual on extracting. *See* **Robertson**, Abraham.
—— Natural history of the human teeth. *See* **Fox**, Joseph.
—— Natural history of the human teeth, etc. *See* **Hunter**, John. **American library of dental science, v. 1.**
—— Nature and treatment of the decay of the. *See* **Some** suggestions, etc.
TEETH, Researches on the development, structure, and diseases of the. *See* **Nasmyth**, Alexander. **American library of dental science, v. 4.**
—— Structure of. By Richard Owen. *See* **Bushnan**, J. S., and others. **Orr's circle of the sciences, v. 1.**
—— Structure, physiology, anatomy and diseases of the. *See* **Burdell**, Harvey and John. **American library of dental science, v. 1.**
—— their health, disease and treatment. *See* **Brown**, J. P. H.
—— their preservation in infancy and manhood to old age. *See* **Canton**, Alfred.

TEETH of wheels, Practical treatise on. *See* **Robinson**, S. W. **Van Nostrand's science series, No. 24.**

Tefft, John Dickinson. The true philosophy of teaching the young to read. 12°. *New York*, 1858.

Tegetmeier, W. B. A manual of domestic economy; with hints on domestic medicine and surgery. 5th ed. 18°. *London*, 1860.
—— Pigeons; their structure, habits, and management. With colored representations of the different varieties, drawn by H. Weir. 4°. *London*, 1868.

Tegoborski, L. de. Commentaries on the productive forces of Russia. 3 v. 8°. *London*, 1855–56.

TEHUANTEPEC, The isthmus of. *See* **Barnard**, J. C.

TEIGNMOUTH bar, Investigation of the movements of. *See* **Spratt**, T.

Teirich, Emil. Thonwaaren-Industrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 9**
—— Thonwaaren-Maschinen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

TELEGRAPH, Atlantic, History of. *See* **Field**, Henry M.
—— Bestimmungen und Tarife für telegraphische Correspondenz. *See* **Wolschitz**, J. L.
—— Book of the. *See* **Davis**, Daniel.
—— The brachial. *See* **Jenks**, Robert W.
—— companion. *See* **Shaffner**, T. P.
—— Electric. *See* **Lardner**, Dionysius.
—— —— *See* **Sabine**, Robert.
—— —— French et al. vs. Rogers et al. *See* **French**, Benjamin B.

Digitized by Google

TELEGRAPH, electric, History and progress of the. *See* **Highton**, E.

—— —— History and progress of the. *See* **Sabine**, Robert.

—— —— History, theory and practice of. *See* **Prescott**, G. B.

—— The electric printing. *See* **Portwine**, E.

—— Electricity and the electric telegraph. *See* **Prescott**, G. B.

—— The electro-magnetic. *See* **Turnbull**, L.

—— Electro-magnetic. **Smiths'n misc. coll., v. 2.**

—— —— —— American. *See* **Vail**, A. [?]

—— —— —— Decision on the application of Morse for an extension of patent for improvement in. *See* **Thomas**, P. F.

—— (The) guide, containing general information and directions for sending telegrams to all parts of England, Scotland, Ireland, and the continents of Europe, Asia, Africa and America; with a telegraph map of Europe. The monthly supplement to 'The electrician'. 8°. *London*, [1863]. pp. 46.

—— The laying of the ocean telegraph, 1857-58. *See* **Mullaly**, J.

—— Lehre von den electrischen Telegraphen. *See* **Lardner**, D. **228 Neuer Schauplatz der Künste.**

—— manual; a history and description of telegraphs. *See* **Shaffner**, T. P.

—— Manual of telegraphic construction. *See* **Douglas**, John C.

—— Manuel de la télégraphie électrique. *See* **Bréguet**, L.

—— The ocean telegraph cable, etc. *See* **Rowett**, W.

—— The ocean; its unfathomable depths and its natural phenomena, with voyage of [cable] ship 'Cyclops'. *See* **Higginson**, Francis.

—— Die österreichischen Telegraphen-Anstalten. *See* **Miliker**, Hermann.

—— signal; the international day, night and fog signal telegraph. *See* **Ward**, William Henry.

—— Signal, for ocean marine service. *See* **Ward**, W. H.

—— Signal. Das Telegraphen- und Signalwesen der Eisenbahnen. *See* **Weber**, M. M. von.

TELEGRAPH. Le télégraphe terrestre, sous-marin, pneumatique. *See* **Laurencin**, Paul.

—— Telegraphenapparate. Von Dr. Leander Ditscheiner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Telegrapher (The). Published by the National telegraphic union. v. 1-13. 4°. *New York*, 1864-77 ——.

Telegraphic (The) journal and electrical review. v. 1-5. 8°. *London*, 1873-77——.

TELEGRAPHY. Annales télégraphiques. *See* **Annales.**

—— The brachial telegraph. *See* **Jenks**, R. W.

—— Die Copirtelegraphen, die Typendrucktelegraphen und die Doppeltelegraphie. *See* **Zetzsche**, Karl Eduard.

—— Dictionnaire pour la correspondance télégraphique secrète. *See* **Dictionnaire.**

—— Handbook of practical. *See* **Culley**, R. S.

—— Handbuch der electro-magnetischen Telegraphie. *See* **Pfeiffer**, Clem. **272 Neuer Schauplatz der Künste.**

—— Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 25.**

—— Journal of. *See* **Electrician.**

—— Manuel de télégraphie électrique. *See* **Bréguet**, Louis.

—— Précis de télégraphie électrique. *See* **Boussac**, A.

—— Report on. By D. Brooks. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

—— Report on. By R. B. Lines. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 2.**

—— Report on. By S. F. B. Morse. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 3.**

—— Telegraph dictionary, and seaman's signal book. *See* **Rogers**, H. J.

—— Der Telegraphenbau. *See* **Rother**, L. F. W.

—— Telegraphic cypher. *See* **Jones** and **Hasselman.**

—— Telegraphic cypher. *See* **Wallace** and **Johnson.**

—— Telegraphic vocabulary for semaphoric telegraphs. *See* **Watson**, B. L.

—— Télégraphie électrique. *See* **Du Moncel**, Thomas.

—— Télégraphie électrique. *See* **Gavarret**, Louis D. J.

Digitized by Google

TELEGRAPHY. Text books of science: telegraphy. *See* **Preece,** W. H., and **Sivewright,** J.

TELESCOPES, Achromatic, especially the equatorial. *See* **Simms,** W.

——— Pro construendo oculo artificiali teledioptrico sive telescopio. *See* **Zahn,** Joannes.

Telford, Thomas. Life of Thomas Telford, civil engineer; written by himself. A narrative of his professional labors, with atlas. Ed. by J. Rickman; with a preface, supplement, annotations, and index. *Illus.* 4°; atlas, fol. *London,* 1838.

——— A life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 3.**

TEMPERATURE. Die Temperatur von Emden. *See* **Prestel,** M. A. F. EMDEN. **Naturforschende Gesellschaft. Kleine Schriften, 15.**

TEMPEST prognosticator. An essay explanatory of the tempest prognosticator in the building of the great exhibition. *See* **Merryweather,** G.

TEMPLARS. Die geheimen Gesellschaften des Mittelalters. *See* **Geheimen.**

Temple, Chandos. *See* **Temple,** R.

Temple, Ralph and Chandos. The Temple anecdotes; invention and discovery. *Illus.* 8°. *London,* 1865.

Temple (The) of nature, or the origin of society. *See* **Darwin,** Erasmus.

Templeton, George. The joint stock directory of banking, financial, insurance and other public companies, for 1867. 8°. *London,* 1867.

Templeton, William. The engineer, millwright, and machinist's practical assistant. A collection of useful tables, rules, etc. 2d ed. 24°. *London,* 1862.

Ten acres enough. A practical experience showing how a very small farm may be made to keep a very large family. With extensive and profitable experience in the cultivation of the smaller fruits. 8th ed. 12°. *New York,* 1864.

TENERIFFE. An astronomer's experiment. *See* **Smyth,** C. Piazzi.

Tennant, J. Mineralogy and crystallography; by. *See* **Ansted,** D. T., **Tennant,** J., and **Mitchell,** W. **Orr's circle of the sciences, v. 4.**

Tennent, J. Emerson. The story of the guns. 8°. *London,* 1864.

Tennent, J. Emerson. A treatise on the copyright of designs for printed fabrics, with considerations on the necessity of its extension: and copious notices of the state of calico printing in Belgium, Germany, and the states of the Prussian commercial league. 12°. *London,* 1841.

TENNESSEE, Annals of. *See* **Ramsey,** J. G. M.

——— state library. Catalogue. October, 1855. 8°. *Nashville,* 1855.

Tenney, William J. A grammatical analyzer, or the derivation and definition of words with their grammatical classification. 12°. *New York,* 1866.

——— The mining magazine: devoted to mines, mining operations, metallurgy, etc.; ed. and conducted by. *See* **Mining.**

TENNIS. Art du paumier-raquetier et de la paume. Par F. A. P. de Garsault. *See* PARIS. **Acad. des sc.; arts et métiers, v. 29, also v. 3.**

Termeyer, Raymond Maria de. Researches and experiments upon silk from spiders, and upon their reproduction. Transl. from the Italian; revised by Burt G. Wilder. Communicated to the Essex institute, July 6, 1866. Extracted from the proceedings, v. 5, published Aug. 1, 1866. 8°. 1866.

Terquem, O. Manuel d'algèbre. 2e éd. 18°. *Paris,* 1836. **9 Manuels Roret.**

——— Manuel de géométrie. *Illus.* 2e éd. 18°. *Paris,* 1835. **8 Manuels Roret.**

——— Manuel de mécanique. 2e éd. 18°. *Paris,* 1836. **31 Manuels Roret.**

Terracultor, The American. *See* **O'Reilly,** H.

TERRESTRIAL magnetism and the magnetism of iron ships. *See* **Rogers,** Fairman. **Van Nostrand's science series, No. 30.**

TERRITORIES of the United States, Geological and geographical surveys of. *See* UNITED STATES. **Interior** department.

Terssen, E. Résistance d'un solide encastré dans des parois cylindriques et soumis à une pression uniformément répartie. Application aux canons se chargeant par la culasse, système Wahrendorff; avec pl. 8°. *Paris,* 1861. pp. 28.

Tessier, P. Chimie pyrotechnique ou traité pratique des feux colorés, et suivi d'un petit traité spécial pour la fabrication des pastilles simples et des pastilles

Digitized by Google

Tessier, P.—Continued.
diamant de différents calibres. 8°. *Paris*, 1859.

TESTING, electrical, Handbook of. *See* **Kempe,** H. R.

——— liquors. Manufacture and distillation of alcoholic liquors. *See* **Duplais,** *aîné et jeune.*

TESTS of steam boilers. *See* PHILADELPHIA. **Internat. exhib. 1876, Group ***.**

——— of turbine water wheels. *See* PHILADELPHIA. **Internat. exhib. 1876, Group **.**

TEUTONIC languages, A comparative grammar of. *See* **Helfenstein,** James.

Texas, almanac for 1869, and emigrant's guide to Texas; showing the great fertility of the soil, and the ease with which it is cultivated, the salubrity of the climate, etc. 12°. *Galveston*, 1869.

——— Her resources and her public men. *See* **De Cordova,** J.

——— New Mexico, California, Sonora, and Chihuahua, Personal narrative of explorations in. *See* **Bartlett,** John Russell.

——— Plantæ Wrightianæ Texano-Neo-Mexicanæ. By A. Gray. **Smiths'n contrib., v. 3 and 5.**

Texier, —. Traité de photographie. *See* **La Sor,** *Comte* de.

TEXTILE arts. Études sur les arts textiles à l'exposition universelle de 1867, Paris. *See* **Alcan,** Michel.

——— fabrics. *See* **Rock,** Daniel. **South Kensington art and science handbooks, No. 1.**

——— ——— Reports on the spinning and weaving of. *See* GREAT BRITAIN. Factories.

——— ——— Le transpositeur ou l'improvisateur de tissus. *See* **Gand,** Édouard.

——— industries. Industries textiles; chanvre, jute et lin; soies et soieries, etc. *See* FRANCE. **Conseil** supérieur de l'agriculture, du commerce, etc.

——— manufactures and costumes of India. *See* **Watson,** J. Forbes.

TEXTILES. Dictionnaire des tissus anciens et modernes. *See* **Bezon.**

——— Essai sur l'industrie des matières textiles. *See* **Alcan,** Michel.

——— Fabrication des tissus. Traité méthodique et encyclopédique. *See* **Falcot,** P.

TEXTILES. Prüfung der Gewebe durch das Mikroskop und durch chemische Reagentien. *See* **Schacht,** H.

Thacher, George H. A key to the 'Trustee's statement'. Letters to the majority of the trustees of the Dudley observatory, showing the misrepresentations, garblings and perversions of their mis-statement. 8°. [*Albany*], 1858.

Thaer, Albrecht. Description des nouveaux instrumens d'agriculture les plus utiles. Trad. de l'allemand, par C. J. A. Mathieu de Dombasle; avec planches. 4°. *Paris*, 1821.

——— Rapport sur la description des instruments aratoires, de. *See* **Héricart de Thury,** L. E. F.

Thaer, A. P. Handbuch des landwirthschaftlichen Bauwesens; bevorwortet u. s. w. von. *See* **Engel,** Friedrich.

Thaer oder Liebig. Versuch einer wissenschaftlichen Prüfung der Ackerbautheorie des Liebig. *See* **Schultze,** F. G.

THAMES quay, Papers relating to the. *See* **French,** F. W.

——— tunnel, Memoir of the. By H. Law. **Weale's papers on engineering, v. 3 and 5.**

Thausing, Julius E. Die Theorie und Praxis der Malzbereitung und Bierfabrikation. Mit besonderer Berücksichtigung des Wiener Brauverfahrens nach eigenen Erfahrungen bearbeitet von. *Illus.* Atlas. 8°. *Leipzig*, 1877.

Thayer, John A. The practical expedite, or time book companion, board computer, interest calculator, and business man's assistant. 12°. *Stoughton, Mass.*, 1847.

Thayer, Sylvanus. Sea wall on Lovell's island; by. *See* UNITED STATES. **War dept.** Bureau of engineers.

THEATRES. Construction des théâtres et des machines théâtrales. Par J. A. Roubo. *See* PARIS. **Acad des sci.; arts et métiers, v. 43.**

——— Treatise on *See* **Saunders,** George.

Theberath, Charles M., and bro. Price list of fine saddlery, hardware, leather, covered and lined, gold, silver and nickel plated, etc. 12°. *Newark, N. J.*, 1864.

Theile, Fr. Wilhelm. Das Mikroskop; aus dem Holländischen von. *See* **Harting,** P.

Theilkuhl, Friedrich. Landwirthschaftliche Verhältnisse, oder neue Anweisung

Digitized by Google

Theilkuhl, Friedrich—Continued.
zum Bonitiren der Grundstücke. 4°. *Quedlinburg und Leipzig*, 1846.

Thénard, Louis Jacques. Traité de chimie élémentaire théorique et pratique; suivi d'un essai sur la philosophie chimique et d'un précis sur l'analyse. 6e éd. T. 1–5. 8°. Atlas. obl. *Paris*, 1834–36.

Thenot, —. Die Oelmalerei; nach Lasalle und. *See* **Hertel,** A. W. **235 Neuer Schauplatz der Künste.**

THEOLOGY. Theological index; references to the principal works of every department of religious literature. *See* **Malcolm,** Howard.

Theophilus, —. Theophili presbyteri et monachi libri 3, seu diversarum artium schedula. Opera et studio Caroli de l'Escaloppier. 4°. *Lutetiae Parisiorum*, 1843.

THEORY and calculations of continuous bridges. *See* **Merriman,** Mansfield. **Van Nostrand's science series, No. 25.**

——— (The) and practice of cotton spinning, or the carding and spinning master's assistant. *Illus.* 8°. *Glasgow*, 1833.

——— of arches. *See* **Allen,** W. **Van Nostrand's science series, No. 11.**

——— (The) of effect; embracing the contrast of light and shade, of color and harmony. By an artist. *Illus.* 12°. *Philadelphia*, 1851.

THERAPEUTICS and materia medica. *See* **Stillé,** Alfred.

——— and pharmacology. *See* **Wood,** George B.

——— Elements of materia medica and. *See* **Pereira,** J.

——— Essays on infant. *See* **Beck,** John B.

——— materia medica, pharmacy, and toxicology. *See* **Bouchardat,** A.

——— Mechanical. *See* **Wales,** Philip S.

——— Modern. *See* **Napheys,** George H.

THERMOCHROSY. La thermochrôse; ou la coloration calorifique. *See* **Melloni,** Macédoine.

THERMO-dynamics, Sketch of. *See* **Tait,** P. G.

THERMOMETER, A daily record of the. 1840–1850. *See* **Delatour,** A. J.

——— Treatise on the. By T. S. Traill. LONDON. **Society of useful knowledge, v. 2.**

Thewalt, P. Medicinische Jahrbücher; hrsg. v. *See* NASSAU.

THIBET, Journey through. *See* **Huo,** E.

Thiébaut de Berneaud, Arsenne. Bibliothèque physico-économique; rédigée par. *See* **Bibliothèque.**

——— Manuel du cultivateur français. T. 1, 2. 18°. *Paris*, 1829. **44 Manuels Roret.**

——— Manuel théorique et pratique du vigneron français. Appendice, 'Influence de la latitude sur la vigne', et 'Fermentation vineuse'; par Bigot de Morogues. *Illus.* 18°. *Paris*, 1836. **58 Manuels Roret.**

——— Nouveau manuel complet de la laiterie. *Illus.* 18°. *Paris*, 1842. **112* Manuels Roret.**

Thieben, Emanuel. Shawls. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Thiers, Rodolphe. Système d'éclairage électrique. *See* **Lacassagne,** J., and **Thiers,** Rodolphe.

Thiersch, Friedrich von. Ueber den 'Begriff und Stellung des Gelehrten'. Rede in der öffentlichen Sitzung der königlichen Akademie der Wissenschaften am 28. März 1856, zu ihrer 97. Stiftungsfeier, gehalten von. 4°. *München*, 1856.

——— Ueber königliche Massnahmen für das Gedeihen der Wissenschaften. Rede zur Feier des allerhöchsten Geburtsfestes Seiner Majestät des Königs Maximilian II. von Bayern gehalten in der öffentlichen Sitzung der K. Akademie der Wissenschaften, am 28. November 1857. 4°. *München*, 1858.

Thillaye, L. J. S. Manuel du fabricant d'indiennes, renfermant les impressions des laines, des châles et des soies; précédé de la description botanique et chimique des matières colorantes. *Illus.* 18°. *Paris*, 1834. **77 Manuels Roret.**

——— Manuel du fabricant de produits chimiques, renfermant la description des principaux utensiles en usage dans les laboratoires. T. 1–2. *Illus.* 18°. *Paris*, 1829. **7 Manuels Roret.**

Thiout, —. Traité de l'horlogerie mécanique et pratique. T. 1–2. *Illus.* 4°. Atlas. fol. *Paris*, 1741.

Thirlwall, Connop. A history of Greece. 8 v. 16°. *London*, [1834]. **Lardner's cabinet cyclopædia, v. 33–40.**

Thiroux, —. Mémoire sur les armes à feu rayées de l'infanterie et de la cava-

Digitized by Google

Thiroux—Continued.
lerie et quelques observations sur l'instruction de ces troupes. *Illus.* 8°. *Paris*, 1859.

—— Réflexions sur les expériences faites en Suède sur des canons à âme rayée se chargeant par la culasse. Idées nouvelles relativement au perfectionnement de ces bouches à feu au parti qu'on peut en tirer à la guerre. 8°. *Paris*, 1857.

Thomä, C. Jahrbücher des Vereins für Naturkunde; hrsg. von. *See* NASSAU.

Thomas, George Martin. Codices mss. bibliothecae regiae Monacencis, Gallici, etc.; ed. by. *See* MUNICH.

—— Die Stellung Venedigs in der Weltgeschichte. Rede gehalten in der öffentlichen Sitzung der königlichen Akademie der Wissenschaften am 25. Juli 1864, von. 4°. *München*, 1864. pp. 27.

Thomas, Isaiah. The history of printing in America; with a biography of printers, and an account of newspapers. To which is prefixed a concise view of the discovery and progress of the art in other parts of the world. 2 v. 8°. *Worcester*, 1810.

Thomas, John J. The country gentleman; ed. by. *See* **Country** gentleman.

—— Farm implements and the principles of their construction and use; an elementary treatise on mechanics, and on natural philosophy generally, as applied to agriculture. *Illus.* 12°. *New York*, 1854. Also, ed. 1869.

Thomas, Joseph. Gazetteer of the United States. *See* **Baldwin,** Thomas, and **Thomas,** J.

—— Universal pronouncing dictionary of biography and mythology. 2 v. roy. 8°. *Philadelphia*, 1870.

—— and **Baldwin,** Thomas. Lippincott's pronouncing gazetteer. A complete pronouncing gazetteer, or geographical dictionary of the world; ed. by. Rev. ed. With appendix. 8°. *Philadelphia*, 1866. Another ed., 1877.

Thomas, Lynall. Rifled ordnance: a treatise on the application of the principle of the rifle to guns and mortars of every calibre. To which is added a new theory of the initial action and force of fired gunpowder. Read before the Royal society, Dec. 16, 1858. 4th ed. rev. 8°. *London*, 1859.

Thomas, Philip Francis. Decision of the commissioner of patents. Application of Eliza Wells, for an extension of the patent of H. A. Wells for improvements in forming and hardening hat bodies. 8°. [*Washington*, 1860.] pp. 7.

—— Decision of the commissioner of patents on the application of Samuel F. B. Morse, for an extension of his patent for a new and useful improvement in electro-magnetic telegraphs. Patented April 11, 1846; extended for seven years from April 11, 1860. 8°. *Washington*, 1860. pp. 32.

—— Decision of the commissioner of patents on the application of William D. Andrews, for an extension of his letters patent, for an improvement in centrifugal pumps. 8°. [*Washington*, 1860.] pp. 13.

Thomas, Robert P. Medical formulary; rev. by. *See* **Ellis,** Benjamin.

—— Universal formulary; rev. by. *See* **Griffith,** Robert E.

Thomas, S. The British negotiator; or, foreign exchange made perfectly easy. 7th ed. 18°. *Newcastle*, 1811.

Thomas, T. Gaillard. A practical treatise on the diseases of women. 8°. *Philadelphia*, 1868. 2d ed., 1869.

Thommen, A. Die Gotthardtbahn. Bemerkungen zur Reform dieses Unternehmens. 8°. *Wien*, 1877.

Thompson, Andie S. Common sense time tables; showing at a glance the date, with grace, when a note, draft, or bill of exchange will mature, given for 30, 60, 90, or 120 days. 18°. *Cincinnati*, 1870.

Thompson, Benjamin. Count Rumford. *See* **Rumford,** *Count.*

Thompson, Erasmus. Examination for officers in the mercantile marine service, including regulations for masters and mates, in foreign and coasting trade. Rules of the board, etc. Also a series of explanatory lectures on navigation and astronomical terms. 8°. *Boston*, 1868.

Thompson, John. Coin chart manual, supplementary to Bank note reporter. Various gold and silver coins. 8°. *New York*, 1849. pp. 45.

Thompson, Robert. The gardener's assistant; practical and scientific. A guide to the formation and management

Digitized by Google

Thompson, Robert—Continued.
of the kitchen, fruit, and flower garden, and the cultivation of conservatory, green-house, and hot-house plants; with a copious calendar of gardening operations. 8°. *Glasgow*, [1859].

Thompson, Thomas S. Coast pilot for the upper lakes, on both shores, from Chicago to Buffalo, Georgian bay and Lake Superior. Also a description of all the lights and lighthouses, on both shores, from Ogdensburg to Superior City. 8°. *Detroit*, 1869.

Thoms, Merton A. Portfolio of origins and inventions; rev. by. *See* **Pulleyn,** W.

Thoms, William. Treatise on the practice of navigation at sea, containing all the details necessary to enable the mariner to become a good practical navigator. roy. 8°. *New York*, 1854.

Thomson, Adam. Time and time keepers. 16°. *London*, 1842.

Thomson, David Purdie. Introduction to meteorology. 8°. *Edinburgh and London*, 1849.

Thomson, Robert Dundas. Cyclopædia of chemistry; with its applications to mineralogy, physiology and the arts. *Illus.* 8°. *London*, 1854.

—— Experimental researches on the food of animals; and the fattening of cattle; with remarks on the food of man; based upon experiments undertaken by order of the British government. From last London edition. 8°. *New York*, 1856.

—— Records of general science. 4 v. 8°. *London*, 1835–36.

Thomson, Thomas. Annals of philosophy; or magazine of chemistry, mineralogy, mechanics, natural history, agriculture, and the arts. 1st series, v. 1–16; 2d series, v. 1–12. 8°. *London*, 1813–26.

—— Chemistry of animal bodies. 8°. *Edinburgh*, 1843.

—— Chemistry of organic bodies. Vegetables. 8°. *London*, 1838.

—— Records of general science; with assistance of. *See* **Records.**

—— A system of chemistry of inorganic bodies. 7th ed. 2 v. 8°. *London*, 1831.

Thomson, *Sir* William, and **Tait,** Peter Guthrie. Treatise on natural philosophy. v. 1. 8°. *Oxford*, 1867.

Thomson, Wyville. Natural history review; ed. by. *See* **Natural history.**

Thon, Christian Friedrich Gottlieb. Abhandlung über Klavier, Saiten-Instrumente, insonderheit der Forte-Pianos und Flügel. 3te Aufl. *Illus.* 8°. *Weimar*, 1843. **89 Neuer Schauplatz der Künste.**

—— Der Fabricant bunter Papiere, vereinigt mit der Kunst, die fabricirten Papier-Tapeten geschmackvoll aufzuziehen, zu vergolden und zu lackiren. 3te Aufl. *Illus.* 8°. *Weimar*, 1844. **25 Neuer Schauplatz der Künste.**

—— Gründliche und vollständige, auf richtige Erfahrungen gestützte Anleitung, alle Arten Pfeifenköpfe zu verfertigen, zu beschlagen und ihnen durch gute Politur ein schönes, glänzendes und dauerhaftes Ansehen zu geben. Hrsg. von. 2te Ausgabe. *Illus.* 8°. *Weimar*, 1843. **60 Neuer Schauplatz der Künste.**

—— Die Holzbeizkunst oder Holzfärberei in ihrem ganzen Umfange. Nebst einem Anhange, Elfenbein, Knochen und Horn zu beizen und zu poliren, auch auf verschiedene Weise zu verschönern. Hrsg. von. 2te Aufl. 8°. *Weimar*, 1840. **107 Neuer Schauplatz der Künste.**

—— Die Kitt-Kunst oder Anleitung alle Arten von Kitten und Mörteln zweckmässig zu bereiten und sie mit Erfolg und Dauer anzuwenden. Hrsg. von. 8°. *Weimar*, 1844. **136 Neuer Schauplatz der Künste.**

—— Die Kunst Bücher zu binden, Futterale zu machen und Landkarten etc. aufzuziehen. Erster Theil. 4te Ausgabe. *Illus.* 8°. *Weimar*, 1844. [Th. 2 is entitled 'Bunte Papiere'.] **2 Neuer Schauplatz der Künste.**

—— Die Löth-Kunst oder Anleitung alle Arten von Löthe und Legirungen zweckmässig zu bereiten und alle Metalle und Metall-Compositionen fest und dauerhaft zu löthen; hrsg. von. *Illus.* 8°. *Weimar*, 1844. **137 Neuer Schauplatz der Künste.**

—— Praktische Anleitung zum Branntweinbrennen, insbesondere des Kartoffelbranntweins; hrsg. von. 2te Aufl. *Illus.* 8°. *Weimar*, 1841. **95 Neuer Schauplatz der Künste.**

—— Die Staffirmalerei und Vergoldungs-

Digitized by Google

Thon, C. F. G.—Continued.
kunst. Als Anhang zu Thon's vollständiger Lackirkunst und insbesondere für die Besitzer der fünften Auflage derselben; hrsg. von. Zweite, von Dr. C. H. Schmidt neu bearbeitete und sehr vermehrte Auflage. 8°. *Weimar*, 1846. **87 Neuer Schauplatz der Künste.**

Thon, G. P. F. Das Fleischerhandwerk mit allen seinen Nebenzweigen. In der zweiten gänzlich umgearbeiteten Auflage. Hrsg. von F. A. Reimann. *Illus.* 8°. *Weimar*, 1842. **12 Neuer Schauplatz der Künste.**

—— Der wohlunterrichtete Wachsfabrikant und Wachszieher. Nebst einer Geschichte und Literatur dieses Gewerbes. *Illus.* 8°. *Ilmenau*, 1828. **35 Neuer Schauplatz der Künste.**

Thon, Theodor. Die Drehkunst; hrsg. von. *See* **Drehkunst. 15 Neuer Schauplatz der Künste.**

—— Lehrbuch der Kupferstecherkunst, der Kunst in Stahl zu stechen und in Holz zu schneiden; frei nach dem Französischen bearbeitet von. *Illus.* 8°. *Ilmenau*, 1831. **54 Neuer Schauplatz der Künste.**

—— Lehrbuch der Reisskunst. Nach des Verfassers Tod neu hrsg. und vermehrt von F. Durand. Mit Atlas. 2te Aufl. 8°. *Weimar*, 1840. **55 Neuer Schauplatz der Künste.**

Thonet,—. Holzindustrie. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 6.**

THORACIC diseases. *See* **Calkins,** Marshall, and **Newton,** Calvin.

—— ——. *See* **Newton,** Calvin, and **Calkins,** Marshall.

Thorman, Robert. Taunus railway; by. *See* **Weale's papers on engineering, v. 5.**

Thornthwaite, W. H. A guide to photography; including improvements in the calotype, daguerreotype, collodion, albumen, and waxed paper processes, with the method of taking stereoscopic pictures. 8°. *London*, 1854. Also ed. 1856.

—— Treatise on photography; transl. by. *See* **Monckhoven,** D. van. **Weale's series, No. 79**.**

Thornton, Robert John. New family herbal; or popular account of the natures and properties of various plants used in medicine, diet and the arts. 8°. *London*, 1810.

Thornton, Robert John—Continued.

Thorpe, *Prof.* Cavendish and his discoveries. **Science lectures for the people, series 7.**

—— Joseph Priestley; his life and chemical work. **Science lectures for the people, series 6.**

THOUGHTS. Pensées et pièces fugitives sur différents sujets. *See* **Pensées.**

Thousand (A) notable things, on various subjects; disclosed from the secrets of nature and art; profitable and of great advantage. 12°. *London*, 1827.

THRESHING machines. Mémoire sur la machine écossaise à battre les grains. *See* **M***.**

—— —— Mémoire sur un rouleau à battre le blé. *See* **Puymaurin.**

—— —— Steam applied to. *See* **Ritchie,** R.

Thun; Johann Paul. Verzeichniss neuer Bücher mit Einschluss der Landkarten und sonstiger im Buchhandel vorkommender Artikel, nebst Angabe der Bogenzahl, der Verleger, der Preise, literarischen Notizen und einem wissenschaftlich geordneten Register. Part 2, 1844; P. 1-4, 1845; P. 1, 1846; P. 2, 1847. 8°. *Leipzig*, 1844-47. [This publication was commenced as a semi-annual catalogue, and afterward changed to a quarterly. P. 2 for 1844 is for the latter half of the year. From 1844 to 1846 the name of Julius Klinkhardt appears in the title. In P. 2, 1847, the name of Karl Franz Kohler appears.]

THUNDER and lightning. By W. De Fonvielle. *See* **Illustrated library of wonders, v. 6.**

—— La nature dans la formation du tonnerre et la reproduction des êtres vivans. *See* **Poncelet,** *M. l'Abbé.*

THUNDERSTORMS, On the nature of. *See* **Harris,** *Sir* W. S.

THURINGIA. Statistisches Büreau Vereinigter Thüringischer Staaten. Mittheilungen. Hrsg. von Bruno Hildebrand. B. 1. Lieferung 1-3. fol. *Jena*, 1866-67.

—— Zeitschrift für die gesammten Naturwissenschaften. Hrsg. von dem naturwissenschaftlichen Vereine für Thüringen. *See* HALLE.

Digitized by Google

Thurston, Robert H. Report on machinery and manufactures; by. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873. v. 3.**

——— Reports of United States commissioners to the Vienna exhibition, 1873; ed. by. *See* UNITED STATES. **State dept. Reports.**

——— Same. General index to; ed. by. *See* UNITED STATES. **State dept. Reports Vienna exhib. v. 4.**

Tibbins, —. Dictionary, English-French and French-English. *See* **Fleming** and **Tibbins.**

Tiby, J. Équipages de ponts militaires en Europe; trad. par. *See* **Birago.**

Ticknor, Almon. Mensuration, or square and triangle; a practical and concise system of geometry and mensuration. 12°. *Pottsville,* 1849.

Ticknor, Caleb. An exposition of quackery and imposture in medicine; a treatise on medical philosophy, with notes by W. Wright. 8°. *London,* 1839.

TIDES. By W. Whewell. *See* **Herschel,** *Sir* J. F. W. **Manual of scientific enquiry.**

Tiedmann, Friedrich, Gedächtnissrede auf. *See* **Bischoff,** T. L. W.

Tieftrunk, Ferdinand. Die Gasbeleuchtung. 8°. *Stuttgart,* 1874.

Tiemann, George, and co., **Stohlmann,** F. A., etc. Catalogue of surgical instruments, apparatus for deformities, trusses, bandages, fractures, etc., manufactured and sold by. 8°. *New York,* 1866.

Tiffany, Joel. A treatise on government and constitutional law: an inquiry into the source and limitation of governmental authority, according to the American theory. 8°. *Albany, N. Y.,* 1867.

Tiffany, William S. Illustrations from Tennyson's May Queen. 4°. 1866.

Tijdschrift, voor natuurlijke geschiedenis en physiologie. Uitgegven door J. Van der Hoeven en W. H. de Vriese. D. 1-12. 8°. *Amsterdam,* 1834-45.

——— voor nijverheid in Nederlandsch Indië. D. 1-7. 8°. *Batavia,* 1851-61.

Tilden, William A. Introduction to the study of chemical philosophy. The principles of theoretical and systematic chemistry. 16°. *New York,* 1876.

Tilden and co. Formulæ for making tinctures, infusions, syrups, wines, mixtures, pills, etc., simple and compound, from fluid and solid extracts. 8°. *New Lebanon, N. Y.,* 1858.

TILES. Abridgments English Patents, No. 22.

——— Art de fabriquer la brique et la tuile en Hollande, par G. Jars. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 14.**

——— Art de fabriquer les carreaux. *See* **Martin, E. Encyclopédie populaire, v. 11.**

——— Art du tuilier; par H. L. Duhamel du Monceau. *See* PARIS. **Acad des sc.; arts et métiers, v. 14; also v. 4.**

——— Fortschritte in der Ziegelfabrication. *See* **Vicat,** Emanuel.

——— Manufacture of bricks and. *See* **Dobson,** Edward. **Weale's series, Nos. 23, 24.**

——— Specimens of tile pavements. *See* **Shaw,** Henry.

——— Der Ziegler. *See* **Schaller,** P. **34 Neuer Schauplatz der Künste.**

Tillman, S. D. Tonometer; or, revolving musical scale, patented Nov., 1853. 4°. *New York,* 1853.

Tilloch, Alexander. Philosophical magazine; ed. by. *See* **Philosophical.**

Tilp, E. Transportmittel, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

TIMBER. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 6.**

——— Burnettizing, preventing the rapid decay of. *See* **Burnettizing.**

——— Construction of; explained by the microscope. *See* **Hill,** John.

——— Kyanizing of timber, and Boucherie's method of preserving by means of the pyrolignite of iron. *See* **Herron,** James. Trellis railway structure.

——— Manuel du cultivateur forestier. *See* **Boitard, J. 45 Manuels Roret.**

——— Nature and properties of. *See* **Tredgold,** Thomas. Elementary principles of carpentry.

——— Strength of. *See* **Barlow,** Peter.

Timbs, John. Arcana of science and art; an annual register of useful inventions, improvements, discoveries and new facts, abridged from the transactions of public societies, and from other scientific jour-

Digitized by Google

Timbs, John—Continued.
nals, British and foreign. *Illus.* v. 1–11. 12°. *London,* 1828–38.
——— Stories of inventors and discoverers in science and the useful arts. *Illus.* 12°. *New York,* 1860.
——— Things not generally known familiarly explained; curiosities of science. 16°. *London,* 1859. Also ed. 1860.
——— The year book of facts in science and art; exhibiting the most important discoveries and improvements. v. 1–36. 12°. *London,* 1839–74. [v. for 1849 wanting.]
——— Year-book of facts in the great exhibition of 1851; its origin, progress, construction, details of the building, most remarkable articles and objects exhibited, etc. Extra volume. 12°. *London,* 1851.
——— Same. International exhibition of 1862. 12°. *London,* 1862.

TIME-keeper (The.) *See* **Mudge,** Thomas.
——— keepers. *See, also,* **Horology.**
——— ——— Time and. *See* **Thomson,** A.
——— ——— Watches, clocks and other. **Abridgments English Patents, No. 9.**
——— ——— Der Zeitmessknecht. *See* **Pressler,** Max R.

Timperley, C. H. Encyclopædia of literary and typographical anecdote; a chronological digest of the most interesting facts illustrative of the history of literature and printing from the earliest period to the present time. Compiled and condensed from Nichol's literary anecdotes, and other authorities. To which are added, a continuation to the present time, comprising recent biographies, chiefly of booksellers, and a practical manual of printing. 2d ed. 8°. *London,* 1842.

TIN. Mechanic's calculator and tinman's guide. *See* **Quantrill,** T. H.
——— plate and sheet-iron worker's monitor. *See* **Winslow,** E. S.
——— plating. Die Kunst des Vergoldens, Verzinnens, etc. *See* **Schmidt,** Christian H. **133 Neuer Schauplatz der Künste.**
——— sheet iron, copper-plate workers. *See* **Blinn,** Leroy J.

TINCTURES, syrups, infusions, etc. *See* **Tilden** and co.

Tinmouth, Nicholas. An inquiry relative to various important points of seamanship, considered as a branch of practical science. 8°. *London,* 1845.

TINNING. Handbuch für Klempner und Lampenfabrikanten. *See* **Lebrun. 53 Neuer Schauplatz der Künste.**
——— Manuel du ferblantier. *See* **Lebrun. 54 Manuels Roret.**
——— Musterzeichnungen von Spenglerwerkzeugen. *See* HESSE DARMSTADT.
——— Tinman's manual. *See* **Butts** I. R.
——— Verzinnen der Kochgeschirre. *See* **Erbe,** Christoph.
——— Zeitschrift für Klempner. *See* **Voigt,** B. F.

Tinter, W. Astronomische Instrumente. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**
——— Geodätische Instrumente. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Tipton, T. C. Digest of cotton bale ties. *See* **Sinsabaugh,** L. W., and **Tipton,** T. C.

Tissier, Charles and Alexandre. L'aluminium et les métaux alcalins; recherches historiques et techniques sur leurs propriétés, leurs procédés d'extraction et leurs usages. *Illus.* 12°. *Paris,* 1858.

Tissot, S. A. A treatise on the diseases incident to literary and sedentary persons; transl. from the French, with notes, by a physician. 12°. *Edinburgh,* 1772.

Titus, John. Improvement in propellers, by J. L. Husband. Argument on application for letters patent. 8°. *Philadelphia,* 1859. pp. 12.

TOBACCO. Abridgments English Patents, No. 42.
——— and cotton, History and cultivation of. *See* **DeCoin,** Robert L.
——— and its adulterations. *See* **Prescott,** H. P.
——— Anleitung zur Erweiterung des Tabakbaues. *See* **Reider,** Jacob Ernst von.
——— its history and associations. *See* **Fairholt,** F. W.
——— its history, cultivation, manufacture and adulterations. *See* **Steinmetz,** A.
——— Monographie du tabac. *See* **Fermond,** Charles.
——— pipes. Anleitung Pfeifenköpfe zu verfertigen. *See* **Thon,** C. F. G. **60 Neuer Schauplatz der Künste.**
——— ——— Art de faire les pipes à fumer le tabac, par H. L. Duhamel du Mon-

Digitized by Google

TOBACCO—Continued.
ceau. *See* PARIS. **Acad roy. des sc.; arts et métiers, v. 1, also v. 8.**

——— Der Taback als wichtige Culturpflanze. *See* **Schmidt, C. H. 238 Neuer Schauplatz der Künste.**

——— Der Tabacks- und Cigarrenfabricant. *See* **Schreiber, E. 183 Neuer Schauplatz der Künste.**

——— Tabak und Tabaksfabrikate. Von Franz Riedl. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

——— tea, coffee, and chocolate, A treatise on. *See* **Pauli,** Simon.

——— The tobacco trade between the United States and foreign countries. *See* UNITED STATES. **Executive.**

Tobold, Adelbert. Chronic diseases of the larynx, with reference to laryngoscopic diagnosis and local therapeutics. Transl. from the German, by George M. Beard. 8°. *New York*, 1868.

Todd, Sereno Edwards. The apple culturist: a complete treatise for the practical pomologist, to aid in propagating the apple, and cultivating and managing orchards. 12°. *New York*, 1871.

——— The young farmer's manual, or how to make farming pay: giving plain and practical details of general farm management; with a chapter on soils, and their cultivation. 2. v. [v. 1 missing.] 12°. *New York*, 1867.

TOILET soap. Darstellung der feinen Toiletseifen. *See* **Ramberg,** Wilhelm. **246 Neuer Schauplatz der Künste.**

Tolhausen, Alexander. A synopsis of the patent laws of various countries. 12°. *London*, 1857. pp. 31.

——— and F., and **Gardissal,** C. D. Technological dictionary in the English, French and German languages. 1e partie. Français-anglais-allemand. 2nd part. English, French, and German. Dritter Theil. Deutsch-englisch-französisch. 18°. *Paris*, 1854–55.

Tollard, Henri. Manuel du grainier pépiniériste. *See* **Julia de Fontenelle,** J. S. E. **43 Manuels Roret.**

Tomes, Robert. The champagne country. 12°. *New York*, 1867.

Tomlinson, Charles. Cyclopædia of useful arts, mechanical and chemical, manufactures, mining, and engineering; edited by. With an introductory essay on the great exhibition of the works of industry of all nations, 1851. *Illus.* 2 v. 8°. *London*, 1854. [3 copies.]

——— Same. v. 3. Supplement. 8°. *London*, 1866. [3 copies.]

——— Introduction to the study of natural philosophy. 12°. *London*, 1853. **Weale's series. No. 2.**

——— Pneumatics. 2d ed. 12°. *London*, 1852. **Weale's series, No. 12.**

——— Rudimentary treatise on the construction of locks; ed. by. 12°. *London*, 1853. [2 copies.] **Weale's series. No. 83.**

——— Rudimentary treatise on warming and ventilation. 12°. *London*, 1850, **Weale's series, Nos. 57, 58.**

Tompkins, Samuel E., and co. Catalogue and invoice prices of Tompkins' patent gig-trees, etc. 8°. *New York*, 1873.

Toni-Fontenay. *See* **Fontenay,** (Toni-).

Tooke, Thomas. A history of prices, and the state of the circulation. v. 1–2. The history of prices from 1793 to 1837, preceded by a brief sketch of the state of the corn trade in the last two centuries; v. 3, the history of prices in 1838–39, with remarks on the corn laws, and on some alterations proposed in our banking system; v. 4, the history of prices from 1839 to 1847, with a general review of the currency question, and remarks on the operation of the act of 7 and 8 Victoria, c. 32. 4 v. 8°. *London*, 1838–48.

TOOL-machines. Die Werkzeug- und Holzbearbeitungs-Maschinen. *See* **Meissner,** G.

——— ——— Die Werkzeugmaschinen. *See* **Hart,** J.

Toole, Henry. Resources of Ireland. *See* **Sproule,** J.

TOOLS and implements. Hilfsmaschinen und Werkzeuge. Frz. Wencelides. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 12.**

——— and models. Preis-Verzeichniss der Werkzeuge und Modelle. *See* HOHENHEIM.

——— Edged. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 15.**

——— Examples of. *See* **Rennie,** G.

Digitized by Google

TOOLS. Handbuch der Werkzeugslehre. *See* **Holtzapfel, C. 178, 179 Neuer Schauplatz der Künste.**

—— Machines and tools used for working metal, etc., by R. Willis. *See* **Lectures on results of the exhibition.**

—— Machines-outils et outils à la main propres à travailler le bois. *See* **Bernier, *aîné*,** and **Arbey,** Ferdinand.

—— Das Schleifen und Poliren der Werkzeuge. *See* **Holtzapfel, C. 200 Neuer Schauplatz der Künste.**

—— Versuche über Leistung und Arbeits-Verbrauch der Werkzeuge. *See* **Versuche.**

—— Werkzeuge für Holzarbeiter u. s. w. *See* **Weiss,** Johann B.

Toone, William. A glossary and etymological dictionary of obsolete and uncommon words, antiquated phrases and proverbs, illustrative of early English literature. 2d ed. 18°. *London*, 1834.

Töpfer, J. G. Lehrbuch der Orgelbaukunst. Bearbeitet in zwei Theilen oder vier Bänden. Mit Atlas. 1. Theil, 1, 2 Abth. 2. Theil, 1, 2 Ab h. 8°. *Weimar*, 1855. **208–211 Neuer Schauplatz der Künste.**

TOPOGRAPHY. Topographical drawings. *See* **Enthoffer,** J.

—— Tratado de trigonometria y topografia. *See* **Cortazar,** Juan.

TORNADO, Account of a, near New Harmony, Ind., April 30, 1852, by J. Chappelsmith. **Smiths'n contrib., v. 7.**

TORONTO (Canada). Magnetical observatory. Abstracts of magnetical observations made during the years 1853–1862. 4°. *Toronto*, 1863.

—— —— Results of meteorological observations made during the years 1860, 1861, and 1862. 4°. *Toronto*, 1864.

TORPEDOES. Lecture on movable torpedoes, submarine guns and rockets. By F. M. Barber. *See* UNITED STATES. **Navy** dept. Ordnance papers.

—— Notes on explosives; their application in torpedo warfare. By Walter N. Hill. *See* UNITED STATES. **Navy** dept. Ordnance papers.

—— Notes on torpedo fuzes. By G. A. Converse. *See* UNITED STATES. **Navy** dept. Ordnance papers.

—— offensive and defensive. *See* **Stotherd,** R. H.

TORPEDOES. Report on spar torpedoes. By Nicol Ludlow. *See* UNITED STATES. **Navy** dept. Ordnance pape s.

—— Spar torpedo; its management. *See* UNITED STATES. **Navy** dept. Ordnance papers.

—— Torpedo experiments at Key West, Florida. *See* UNITED STATES. **Navy** dept. Ordnance papers.

—— Torpedo war and submarine explosions. *See* **Fulton,** R.

TORRENTS, Treatise on rivers and. *See* **Frisi,** Paolo. **Weale's series, Nos. 121, 122.**

Torrey, John. A flora of the state of New York. *See* NEW YORK (state). **Geological** survey.

—— Outlines of the lectures on chemistry delivered at the college of physicians and surgeons of the university of the state of New York. 2d ed. 8°. *New York*, 1829.

—— Plantæ Fremontianæ; Batis Maritima and Darlingtonia Californica. **Smiths'n contrib., v. 6.**

Torrey, John W. Interest tables, showing at sight, or by one addition, the interest of any number of dollars from one to 10,000, from 1 day to 136 days, and from 1 month to 12 months. 8°. *Philadelphia*, 1857.

Tosswill, Edward B. The American cambist, or the principles and practice of foreign exchanges. To which are added tables of European arbitrations. 4°. *New York*, 1867.

Tóth, Sándor. Természettudományi társulat közlönye szerkesztő. *See* PESTH.

Totten, Benjamin J. Naval text-book and dictionary. 12°. *New York*, 1862.

Totten, Joseph G. Report addressed to Jefferson Davis, secretary of war, on the effects of firing with heavy ordnance from casemate embrasures with various kinds of missiles in the years 1852–55, West Point, N. Y. 8°. *Washington*, 1857. UNITED STATES. **War dept. Bureau of engineers. Papers on practical engineering, No. 6.**

Touchstone (A) for gold and silver wares, directing how to know adulterated and unlawful goldsmith's works, and the greatness of the cheat therein, and how to punish the offenders, and recover rec-

Digitized by Google

Touchstone (A)—Continued.
ompence to the party wronged. 2d ed., with additions by W. B. 12°. *London*, 1678.

Tourneux, Félix. Maschinenbauer; verbessert von. *See* **Le Blanc. 143, 145, and 196 Neuer Schauplatz der Künste.**

Tourneux, Prosper. Dictionnaire des arts, etc., par. *See* **Laboulaye**, C. P. L.

Tousard, Louis de. American artillerists' companion, or elements of artillery: treating of all kinds of fire-arms in detail, and of the formation, object and service of the flying or horse artillery; preceded by an introductory dissertation on cannon. 3 v. [1 v. plates.] 8°. *Philadelphia*, 1809–13.

Toussaint, —. Manuel d'architecture. 2e éd. *Illus.* 2 v. 18°. *Paris*, 1832. **30 Manuels Roret.**

—— Manuel du maçon-p âtrier, du carreleur, du couvreur, et du paveur. *Illus.* 18°. *Paris*, 1834. **83 Manuels Roret.**

Toussaint, J. Traité d'arpentage et de nivellement à l'usage des agriculteurs. *See* **Leclerc**, J., and **Toussaint**, J. **Bibliothèque rurale, 2e série, No. 14.**

Tovey, Charles. Champagne: its history, manufacture, properties, etc.; with some prefatory remarks upon wine and wine merchants. sm. 8°. *London*, 1870.

Towler, John. The American photographic almanac; being an annual appendix to Humphrey's journal of photography and the allied arts and sciences; ed. by. 1864-1867. 12°. *New York*, 1864–67.

—— Dry plate photography, or the tannin process made simple and practical for operators and amateurs. 18°. *New York*, 1865.

—— Humphrey's journal of the daguerreotype and photographic arts; ed. by. *See* **Humphrey's** journal.

—— The magic photograph, wi h full directions and formulas for making it. 18°. *New York*, 1866. pp. 10.

—— The negative and the print; or the photographer's guide in the gallery and in the field; a text book for the operator and amateur; containing concise instructions for the preparation of the different kinds of photographs now in vogue. 12°. *New York*, 1866.

Towler, John. The porcelain picture, or full instructions how to make photographs on po celain or opal glass. 16°. *New York*, 1865.

—— The silver sunbeam; a text book on sun drawing and photographic printing; comprehending all the wet and dry processes at present known, with collodion, albumen, gelatine, wax, resin, and silver; as also heliographic engraving, photolithography, photozincography, celestial photography, photography in natural colors, tinting and coloring of photographs, printing in various colors; the carbon process, the card-picture, the vignette, and ster ography. 12°. *New York*, 1864. 5th ed. *New York and London*, 1866. Another ed., 1869.

Town, Ithiel. A description of Town's improvement in the principle, construction and practical execution of bridges. With practical and scientific remarks and observations on the strength, etc., of suitable materials; exposure to winds, causes of decay, and other general defects in the arched bridges, as well as other modes, constructed of wood. 4°. *New York*, 1839. [2 copies.]

Townsend, George H. The manual of dates; a dictionary of the most important events in the history of mankind to be found in authentic records. sm. 4°. *London*, 1867.

TOXICOLOGY. Traité de toxicologie. *See* **Orfila**, J. B.

TOYS. Abridgments English Patents, No. 51.

—— The boy's own toy-maker. *See* **Landells**, E.

—— Illustrirtes Spielbuch für Knaben. *See* **Wagner**, Hermann.

—— Illustrirtes Spielbuch für Mädchen. *See* **Leske**, Marie.

TRADE and commerce of the British North American colonies with the United States and other countries. *See* UNITED STATES. **Congress.**

—— and commerce. Statistiek van der handel en de scheepvaart op Java en Madura. *See* JAVA en Madura.

—— and navigation of the province of Canada, Tables of. *See* CANADA.

—— A dictionary of trade products, etc. *See* **Simmonds**, P. L.

Digitized by Google

TRADE marks. American trade mark cases. *See* **Cox**, Rowland.

——— ——— A digest of the laws of. *See* **Coddington**, Charles E.

——— ——— Digest of American cases relating to. *See* **Law**, S. D.

——— ——— English and American, Law of. *See* **Upton**, Francis H.

——— ——— Law of. *See* **Adams**, F. M.

——— ——— Law of. *See* **Browne**, William Henry.

——— ——— Laws relating to. *See* **Whitman**, Charles Sidney.

——— ——— Législation française et étrangère sur les marques de fabrique. *See* **Gardissal**, and **Gardissal**, C. D.

——— ——— The merchandise marks act, with notes. *See* **Poland**, H. Bodkin.

——— The philosophy of. *See* **Stirling**, P. J.

——— Report of the Philadelphia board of. *See* **Blodget**, Lorin.

TRADES and manufactures. Lehrbuch der Gewerbskunde. *See* **Leng**, H. **62 Neuer Schauplatz der Künste.**

——— Arts et métiers mécaniques. *See* **Encyclopédie** méthodique.

——— Book of. *See* **Whitlock**, N., and others.

——— Breslauer Gewerbe-Blatt. *See* **Breslauer.**

——— Descriptions des métiers; par J. E. Bertrand. *See* PARIS. **Acad. roy. des sci.; arts et métiers.**

——— Kärntnerisches Gewerbe-Blatt. *See* KLAGENFURT.

——— Leipziger Handelszeitung. *See* **Leipziger.**

——— Neueste Erfindungen und Erfahrungen auf den Gebieten der praktischen Technik, der Gewerbe, etc. *See* **Neueste.**

——— Ueber die Gewerbe-Ausstellung des Herzogthums Nassau zu Wiesbaden, im Juli 1863. *See* **Mirus**, A., *jr.*

TRADESMAN, The young. *See* **Young** tradesman.

TRADESMEN'S cards, political tokens, etc. *See* **Bushnell**, Charles I.

Traforo delle Alpi, tra Bardonnèche e Modane. fol. *Torino*, 1863.

Traill, Thomas Stewart. The thermometer and pyrometer, by. *See* LONDON. **Society of useful knowledge, v. 2.**

Traité de commerce avec l'Angleterre. Enquête. Produits divers. Conseil supérieur de l'agriculture, du commerce et de l'industrie. 4°. *Paris*, 1861.

Traitté de l'élévation des eaux. Enseignant ses principes et des maximes pour connoitre les justes proportions qui sont à observer dans la conduite des eaux. *Illus.* 4°. *Munic*, 1716.

Trall, R. T. The new hydropathic cook book, with recipes for cooking on hygienic principles. 18°. *New York*, 1863.

——— Uterine diseases and displacements: a practical treatise on the various diseases, malpositions, and structural derangements of the uterus and its appendages. 8°. *New York*, 1854.

Tramblay, A. Annuaire du cosmos; manuel de la science. *See* **Annuaire.**

TRANSACTIONS. *See, also,* **Periodicals.**

——— Abhandlungen der naturforschenden Gesellschaft zu Görlitz. *See* GÖRLITZ.

——— Abhandlungen der naturhistorischen Gesellschaft zu Nürnberg. *See* NUREMBERG.

——— Abhandlung des zoologisch-mineralogischen Vereines. *See* REGENSBURG.

——— Académie royale des sciences, belles-lettres et arts de Bordeaux. Séance publique. *See* BORDEAUX.

——— Acta universitatis Lundensis. *See* LUND.

——— Actes de la Société helvétique des sciences naturelles. *See* SWITZERLAND.

——— Annales de l'Auvergne. *See* **Clermont-Ferrand.**

——— Annales des sciences physiques et naturelles par la Société impériale d'agriculture. *See* LYONS.

——— Årskrift utgiven af konglige vetenskapssocieteten i Upsala. *See* UPSALA.

——— Bericht des Offenbacher Vereins für Naturkunde. *See* OFFENBACH.

——— Bulletin de la Société des sciences naturelles de Neuchâtel. *See* NEUCHATEL.

——— Bulletin de la Société impériale des naturalistes de Moscou. *See* MOSCOW.

——— Bulletin de la Société industrielle de Mulhouse. *See* MULHOUSE.

——— Bulletin der bayerischen Akademie. *See* MUNICH.

——— Compte-rendu de la Société d'émulation de Montbéliard. *See* MONTBÉLIARD.

——— Comptes rendus des séances de l'Académie des sciences. *See* FRANCE.

Digitized by Google

TRANSACTIONS. Gelehrte Anzeigen; hrsg. von der bayerischen Akademie. *See* MUNICH.

——— Handelingen der Nederlandsche entomologische vereeniging. *See* HOLLAND.

——— Histoire de l'Académie française, 1666–1788. *See* PARIS.

——— Jahrbuch der k. k. geologischen Reichsanstalt. *See* VIENNA.

——— Jahrbücher des Vereins für Naturkunde. *See* NASSAU.

——— London catalogue of periodicals, newspapers, and transactions of various societies. *See* LONDON.

——— Mémoires de l'Académie des sciences, arts, et belles-lettres de Dijon. *See* DIJON.

——— Mémoires de l'Académie des sciences et lettres de Montpellier. *See* MONTPELLIER.

——— Mémoires de l'Académie impériale de Metz. *See* METZ.

——— Mémoires de l'Académie impériale des sciences, arts et belles-lettres de Caen. *See* CAEN.

——— Mémoires de la Société des antiquaires de Picardie. *See* AMIENS.

——— Mémoires de la Société des sciences naturelles de Cherbourg. *See* CHERBOURG.

——— Mémoires de la Société des sciences physiques et naturelles de Bordeaux. *See* BORDEAUX.

——— Mémoires de mathématique et de physique, présentés et lus dans les assemblées de l'Académie des sciences. *See* PARIS. **Académie des sciences.**

——— Memoirs of the American academy of arts and sciences. *See* BOSTON.

——— Memoirs of the literary and philosophical society of Manchester. *See* MANCHESTER.

——— Memorie dell'Accademia delle scienze dell'Istituto di Bologna. *See* BOLOGNA.

——— Mittheilungen der k. k. geographischen Gesellschaft. *See* VIENNA.

——— Mittheilungen der naturforschenden Gesellschaft in Bern. *See* BERN.

——— Mittheilungen des Gewerbe-Vereins, Hannover. *See* HANOVER.

——— Monatsblatt des Gewerbe-Vereins, Hannover. *See* HANOVER.

——— Nouveaux mémoires de la Société impériale des naturalistes de Moscou. *See* MOSCOW.

——— Nova acta Regiæ societatis scientiarum Upsaliensis. *See* UPSALA.

TRANSACTIONS of the American dental association. *See* **American.**

——— of the American institute of the city of New York. *See* NEW YORK (state).

——— of the American philosophical society. *See* PHILADELPHIA.

——— of the Highland and agricultural society of Scotland. *See* SCOTLAND.

——— of the Institution of civil engineers. *See* LONDON.

——— of the Institution of engineers in Scotland. *See* **Institution.**

——— of the Institution of naval architects. *See* LONDON.

——— of the Literary and historical society of Quebec. *See* QUEBEC.

——— of the Liverpool polytechnic society. *See* LIVERPOOL.

——— of the Microscopical society. *See* LONDON.

——— of the New York state agricultural society. *See* NEW YORK (state).

——— of the Plymouth institution and Devon and Cornwall natural history society. *See* PLYMOUTH.

——— of the Royal microscopical society. *See* **Monthly** microscopical journal.

——— of the Royal Scottish society of arts. *See* **Royal.**

——— of the Society for the encouragement of arts, manufactures and commerce. *See* LONDON.

——— of the Society for the promotion of agriculture, arts, and manufactures of the state of New York. *See* NEW YORK.

——— of the Wisconsin academy of sciences, arts, and letters. *See* WISCONSIN.

——— Philosophical transactions of the Royal society. *See* LONDON. **Royal society.**

——— Proceedings of the American association for the advancement of science. *See* **American association.**

——— Proceedings of the American philosophical society. *See* PHILADELPHIA.

——— Proceedings of the literary and philosophical society of Liverpool. *See* LIVERPOOL.

——— Proceedings of the literary and philosophical society of Manchester. *See* MANCHESTER.

——— Proceedings of the London electrical society. *See* LONDON.

Digitized by Google

TRANSACTIONS. Proceedings of the philosophical society of Glasgow. *See* **Philosophical.**

—— Proceedings of the Royal society of Van Diemen's Land. *See* HOBART TOWN.

—— Recueil des actes de l'Académie impériale des sciences, belles-lettres et arts de Bordeaux. *See* BORDEAUX.

—— Rendiconti, Reale istituto Lombardo di scienze, lettere ed arti. *See* MILAN.

—— Report of the British association for the advancement of science. *See* **British** association.

—— Report of the national academy of sciences. *See* **National** academy.

—— Report of the Royal society of Tasmania. *See* HOBART TOWN.

—— Schriften der königlich-physikalisch-ökonomischen Gesellschaft zu Königsberg. *See* KÖNIGSBERG.

—— Schriften der naturforschenden Geselschaft in Danzig. *See* DANTZIC.

—— Természettudományi társulat közlönye. *See* PESTH.

—— Travaux de la Société académique des sciences, arts, belles-lettres et agriculture de Saint-Quentin. *See* SAINT-QUENTIN.

—— Verhandelingen van het Bataviaasch genootschap van kunsten en wetenschappen. *See* BATAVIA.

—— Verhandelingen van het Koninklijk instituut van ingenieurs. *See* HAGUE.

—— Verhandlungen der k. k. zoologisch-botanischen Gesellschaft. *See* VIENNA.

—— Verhandlungen der mineralischen Gesellschaft. *See* ST. PETERSBURG.

—— Verhandlungen der polytechnischen Gesellschaft. *See* BERLIN.

—— Verhandlungen der schweizerischen naturforschenden Gesellschaft. *See* SWITZERLAND.

—— Verhandlungen des Gewerbe-Vereins zu Görlitz. *See* GÖRLITZ.

—— Verhandlungen des naturhistorischen Vereins der preussischen Rheinlande und Westphalens. *See* **Prussian** Rhenish provinces.

—— Verhandlungen des naturhistorischen Vereins für Anhalt in Dessau. *See* DESSAU.

—— Verhandlungen des Vereins für Eisenbahnkunde. *See* BERLIN.

—— Verhandlungen des Vereins zur Beförderung des Gewerbfleisses in Preussen. *See* BERLIN.

TRANSMISSION of power by wire rope. *See* **Stahl,** Albert W. **Van Nostrand's science series, No. 28.**

TRANSPORTATION, Apparatus of. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 19.**

—— Les moyens de transport appliqués dans les mines, les usines et les travaux publics. *See* **Évrard,** Alfred.

—— of sick and wounded by pack animals, Report on. *See* UNITED STATES. **War dept. Surgeon general's office. Circular 9.**

—— Purchase of camels for military transportation. *See* UNITED STATES. **War** department.

—— Transportmittel, etc. Von E. Tilp. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

TRANSPOSITION of tissues. Le transpositeur, ou l'improvisateur de tissus. *See* **Gand,** Édouard.

TRANSVERSE loads, Strength of beams under. *See* **Allen,** W. **Van Nostrand's science series, No. 19.**

Trask, A. K. P. Practical ferrotyper. 16°. *Philadelphia,* 1872.

Trastour de Verano, Eugene. Rudiments of music, for the use of teachers and their pupils, and especially intended for class teaching in private and public schools. 16°. *New York,* 1865.

Trautwine, John C. The field practice of laying out circular curves for railroads. 6th ed. 18°. *Philadelphia,* 1869.

—— A new method of calculating the cubic contents of excavations and embankments by the aid of diagrams. 8°. *Philadelphia,* 1851.

Trauzl, Isidor. Dynamit. Ihre ökonomische Bedeutung und ihre Gefährlichkeit. Ein Wort zur Beachtung für Fachmänner und Laien. 8°. *Wien,* 1876. pp. 47.

TRAVELING. The art of travel. *See* **Galton,** Francis.

—— Shifts and expedients of camp life, travel, and exploration. *See* **Lord,** W. B., and **Baines,** T.

—— The traveller's oracle. *See* **Kitchiner,** William.

TRAVELS. A journey in Brazil. *See* **Agassiz,** Louis J. R. and Elizabeth.

—— Recollections of a journey through Tartary, Thibet, and China. *See* **Huc,** E.

Digitized by Google

TRAVELS. Reiseskizzen aus den Vereinigten Staaten von Nordamerika. *See* **Kübeck,** Max.

——— Relation d'un voyage dans l'intérieur de l'Amérique méridionale. *See* **La Condamine.**

——— Wirthschaftliche Reisenotizen. *See* **Niedermayr,** J.

Treadwell, Daniel. Boston journal of philosophy and the arts; by. *See* **Webster,** J. W.

TREATIES now in force between the United States and the Indian tribes. *See* UNITED STATES. **Interior** dept. Indian bureau.

——— of the United States in force on the 1st day of December, 1873. *See* UNITED STATES. **Congress.**

——— Opinions of attorneys-general, etc., with reference to. *See* UNITED STATES. **Dept.** of justice.

——— Traité de commerce avec l'Angleterre. Enquête. *See* **Traité** de commerce.

Treatise (A) on domestic pigeons, containing valuable information concerning the nature, properties, and management of their various species. 12°. *London,* 1838.

——— (A) on soap making; containing an account of the alkaline materials, test for discovering the presence of an alkali, etc.; with full directions for manufacturing yellow, pure white, and perfumed hard soap, also complete instructions for making green or soft soap, etc., by a manufacturer. 12°. *New York,* 1810.

——— (A) on wire fencing; unquestionably proving its superiority to any article heretofore used, for enclosing railroads, canals, fields, cattle pastures, gardens, cemeteries, heneries, etc. 8°. *Boston,* 1856. pp. 29.

Trebuchet, Adolphe. Dictionnaire de l'industrie; par. *See* **Baudrimont,** A. E., and others.

Tredgold, Thomas. Carpentry and joinery of roofs. *See* **Robison,** J., **Price,** —, and **Tredgold,** T., **Weale's series, No. 124.**

——— Elementary principles of carpentry; with practical rules and examples. To which is added an essay on the nature and properties of timber. With an appendix containing specimens of various ancient and modern roofs, by Peter Barlow. 4th ed. *Illus.* 4°. *London,* 1853.

Tredgold, Thomas. Same. 1st Amer. ed. *Philadelphia,* 1837.

——— Essays on mill-work and other machinery; notes by. *See* **Buchanan,** Robertson.

——— Practical builder, and workman's companion; rev. by. *See* **Nicholson,** Peter.

——— Practical essay on the strength of cast iron, and other metals; with an extensive table of the properties of materials. 3d ed. *Illus.* 8°. *London,* 1831. 4th ed. *London,* 1842.

——— A practical treatise on railroads and carriages. 2d ed. *Illus.* 8°. *London,* 1835.

——— Principles of warming and ventilating public buildings, dwelling-houses, manufactories, hospitals, hot-houses, conservatories, etc. 2d ed. 8°. *London,* 1824. Another ed., 1836.

——— The steam engine, comprising an account of its invention and progressive improvement; with an investigation of its principles, and the proportions of its parts for efficiency and strength: detailing also its application to navigation, mining, impelling machines, etc., and the results collected in numerous tables. *Illus.* 4°. *London,* 1827.

——— The steam engine [1st series]; its invention and progressive improvement; an investigation of its principles, and its application to navigation, manufactures and railways. A new edition enlarged by the contributions of eminent scientific men, and extended to the science of steam naval architecture. Rev. and edited by W. S. B. Woolhouse. With appendix. Index by J. Hann. *Illus.* 2 v. 4°. *London,* 1838.

CONTENTS OF APPENDIX.

Indicator. By J. Glynn.
Marine boilers. By J. Dinnen.
Memoir of the steamship Medea. By T. Baldock.
Method of vaporization. By T. Howard.
Motion of steam vessels. By P. W. Barlow.
Paddle wheels. By A. A. Mornay.
Rules for calculating the steam engine. By W. S. B. Woolhouse.
Steam journal. By T. Baldock.
Steamboats of the United States. By J. Renwick.
Theory of the steam engine. By W. S. B. Woolhouse.
Time and traverse tables. By R. Oliver.

——— The steam engine. [2d series.] 3 v. 1 v. plates. 4°. *London,* 1850–53.

Digitized by Google

Tredgold, Thomas—Continued.

CONTENTS.

v. i. The principles and practice and explanation of the machinery of locomotive engines; with descriptive text. To which are added rules and regulations for the management of a locomotive engine, with experiments on the resistance of railway trains, by J. Sewell. The dimensions of the locomotive engine boiler in relation to its expansive powers, by R. Armstrong. The consumption of fuel and the evaporation of water, by E. Woods.

v. ii. The principles and practice and explanation of the machinery used in steam navigation; examples of British and American steam vessels; and papers on the properties of steam, and on the steam engine in its general application; with the addition of recent examples of the inventions of the engineers of the east and west coasts of the Atlantic. Also, memoir of steamship Medea, and form of steam journal, by T. Baldock. Part 1, text; part 2. plates.

v. iii. The principles, practice and explanation of the construction of the steam engine, including pumping, stationary, and marine engines: examples of boilers used for steam navigation, and of those employed in her majesty's service; withan example of the turbine wheel, by J. B. Francis. Construction of boilers for marine en ines, by J. Dinnen. Paddle wheels and the screw, by G. Rennie. Resistance to the blades of screw propellers, by R. Bodmer. Experiments on the paddles of steamers, by T. Ewbank. A glossary of terms applicable to marine engines and boilers, with French and Spanish translations, by F. G. Quesada; and a general index.

——— Steam navigation: vessels of iron and wood; the steam engine; and on screw propulsion. Edited by John Weale. [This work is a republication of the appendices to the new edition of Tredgold on the steam engine.] Text, illus., 4°; atlas, fol. *London*, 1858.

CONTENTS OF APPENDICES.

Appendices A and B. 2d ed. By J. Laird, Forrester and co.; John Hague, T. Crampton, Fairbairn, and Murray; O. Lang and J. Whitelaw. 1845.

Appendix C. Gorgon engines on board the Cyclops. By S. Clegg, jr. 1842.

Appendix D. The Archimedean screw or submarine propeller. By E. Galloway. 1842.

Appendices E and F. The Isis, by Pitcher. Or on, by Read. Engines of the Isis, by Miller and Ravenhill. Cyclops, by Sir W. Symonds. Engines of the Dee and Solway packets, 1842, by Scott, Sinclair and co. Disturbance of the compass in iron built ships, 1840, by G. B. Airy.

——— Strength and other properties of cast iron; 2d part of 'Strength of metals', by. *See* **Hodgkinson,** E.

——— Treatise on carpentry and joinery. *See* **Robison,** J., and **Tredgold,** T. **Weale's series, No. 123.**

TREES. *See, also,* **Botany and Sylva.**

——— American handbook of ornamental. *See* **Meehan,** Thomas.

——— and shrubs of Great Britain. *See* **Loudon,** J. C.

——— Der Baum. *See* **Schacht,** H.

——— of America, native and foreign. *See* **Browne,** D. J.

——— plants and flowers, where and how they grow. A familiar history of the vegetable kingdom. By the author of 'Our own birds'. 24°. *Philadelphia*, 1870.

——— Rural essays. *See* **Downing,** A. J.

TRELLISES. Manuel du treillageur et du menuisier des jardins. *See* **Desormeaux,** A. O. P. **75 Manuels Roret.**

Trémery, —. Manuel d'arithmétique. *See* **Collin. 15 Manuels Roret.**

——— Manuel de calligraphie, trad. par. *See* **Manuel** de calligraphie. **111 Manuels Roret.**

——— Manuel complet du teneur de livres. 3e éd. 18°. *Paris*, 1836. **60 Manuels Roret.**

Trentsuk, C. A. Des machines à vapeur; de leur origine, de leur construction, de leur force, des moyens de les faire fonctionner, des mesures de sureté à prendre pour éviter les accidens. 8°. *Bordeaux*, 1836.

Trench, F. W. A collection of papers relating to the Thames quay; with hints for some further improvements in the metropolis. *Illus.* 4°. *London*, 1827.

Trench, Richard Chenevix. On the study of words. Lectures addressed originally to the pupils of the diocesan training school Winchester. 25th American from 9th English ed. 12°. *New York*, 1866.

——— A select glossary of English words used formerly in senses different from their present. 12°. *New York*, 1860.

Trendall, E W. Examples for roofs, etc.: containing roofs for theatres, show rooms, warehouses, churches, chapels, schools, villas, green-houses, conservatories, stables, cottages, etc. With their scantlings figured, and details drawn to a large scale. 4°. *London*, 1851.

Tresca, M., and others. Visite à l'exposition universelle de Paris, en 1855. Publié avec la collaboration de M. M. Alcan,

Digitized by Google

Tresca, M., and others—Continued. Baudement, Boquillon, [etc.] sous la direction de. Nouvelle éd. 8°. *Paris*, 1855.

TRIAL of Andrew Johnson. *See* UNITED STATES. **Congress.**

——— of Ebenezer Haskell in lunacy, and his acquittal before Judge Brewster, in November, 1868. Together with a brief sketch of the mode of treatment of lunatics in different asylums, in this country and in England. roy. 8°. *Philadelphia*, 1869.

——— of steam fire engines. *See* PHILADELPHIA. **Internat. exhib. 1876, Group ****.**

Trials of an inventor. *See* **Peirce,** Bradford K.

TRIESTE. Bau des Slip und Trocken-Docks in Triest. *See* **Heider,** Eduard J.

Trifet, F. A descriptive catalogue of American and foreign postage stamps, issued from 1840 to 1868. 4th ed. of Trifet's price list. sm. 4°. *Boston*, 1868. pp. 17.

TRIGONOMETRICAL dialing. Horographia trigonometrica. *See* **Gruber,** Bernardus P.

——— survey. By Roy. *See* **Science,** Miscellaneous.

TRIGONOMETRY, An elementary treatise on. *See* **Peirce,** Benjamin.

——— Elements of analytic. *See* **Hassler,** F. R.

——— Elements of plane. *See* **Bridge,** B.

——— Elements of plane. *See* **Hann,** J. **Weale's series, No. 91.**

——— Elements of spherical. *See* **Hann,** J. **Weale's series, No. 92.**

——— Higher geometry and. *See* **Scholfield,** N.

——— Lessons in. *See* **Kirkman,** T. P. **Weale's series, No. 105.**

——— plane and spherical. *See* **Chauvenet,** William.

——— plane and spherical. *See* **Hackley,** Charles W.

——— plane and spherical. *See* **Keith,** Thomas.

——— Tratado de trigonometria y topografia. *See* **Cortazar,** Juan.

——— Trigonométrie rectiligne et sphérique. *See* **Simpson,** Thomas.

Tring, —. Gehülfe für Haus- und Stubenmaler. *See* **Barber,** E., **Tring,** and **Herts. 204 Neuer Schauplatz der Künste.**

TRINIDAD, Report on the geology of. *See* GREAT BRITAIN. **West India** survey.

Trommer, C. Die Bonitirung des Bodens vermittelst wildwachsender Pflanzen. Ein Leitfaden für Boniteure, Landwirthe, Forstmänner und Gärtner. Nebst einer Tabelle von. 8°. *Greifswald*, 1853.

TROPICAL climates, their influence on European constitutions. *See* **Johnson,** James.

——— fibres. *See* **Squier,** E. G.

——— world. *See* **Hartwig,** G.

Troschke, A. Die Branntweinsteuer-Gesetzgebung; hrsg. von. *See* **Gumbinner,** L.

Troska, Richard. Die Hochofen-Dimensionen auf Grundlage des Hochofen-Prozesses. 8°. *Weimar*, 1867.

Trow, John F. New York city directory; publ. by. *See* **Wilson,** H.

——— Specimen book of the letter press, stereotype, electrotype, and wood-cut printing establishment of. 8°. *New York, n. d.*

Trowbridge, John. Annual of scientific discovery; ed. by. *See* **Wells,** David A.

TROY and its remains. *See* **Schliemann,** Henry.

Trübner, Nicolas. Bibliographical guide to American literature. A classed list of books published in the United States of America during the last forty years: with bibliographical introduction, notes and alphabetical index; compiled and ed. by. 8°. *London*, 1859.

TRUNKS. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 12.**

——— Album der Musterzeichnungen für Täschner. *See* **Album.**

Truran, William. The iron manufacture of Great Britain, theoretically and practically considered. *Illus.* 4°. *London*, 1855.

——— Same. 2d ed., including descriptive details of the ores, fuels, and fluxes employed. Rev. by J. Arthur Phillips and W. H. Dorman. fol. *London*, 1862.

——— Useful metals and their alloys; by. *See* **Scoffern,** J., and others.

TRUSSES and bandages. *See* **Glover,** Ralph.

TRUTH, Evangelical. De evangelica veritate. *See* **Eusebius,** Pamphilius.

Tsiology, a discourse on tea: an account of that exotic, botanical, chymical,

Digitized by Google

Tsiology—Continued.
commercial, and medical. With notices of its adulteration: the means of detection; tea making; with a brief history of the East India company, etc. By a tea dealer. 3d ed. 8°. *London*, 1827.

Tuck, John. The private brewer's guide to the art of brewing ale and porter, particularly adapted to the use of the families of the nobility, gentry, farmers and private brewers. 8°. *London*, 1822.

Tucker, Luther. Country gentleman; ed. by. *See* **Country** gentleman.

—— and son. Cultivator; ed. by. *See* **Cultivator.**

Tuckerman, Henry T. Book of artists. American artist life; comprising biographical and critical sketches of American artists, preceded by an historical account of the rise and progress of art in America. 8°. *New York*, 1867.

—— Memorial of Horatio Greenough. 12°. *New York*, 1853.

TUITION. *See* **Teaching.**

Tulk, Alfred, and **Henfrey**, Arthur. Anatomical manipulation; or, the methods of pursuing practical investigations in comparative anatomy and physiology. Also an introduction to the use of the microscope, etc., and appendix. *Illus.* 16°. *London*, 1844.

Tull, Jethro. The horse-hoeing husbandry, or a treatise on the principles of tillage and vegetation. To which is prefixed an introduction, by William Cobbett. 8°. *London*, 1829.

Tully, William. Materia medica, or pharmacology and therapeutics. v. 1. Nos. 1-24. [No. 16 wanting.] 8°. *Springfield*, 1858.

Tuner's manual, The. *See* **Hill**, Sumner, and **Brown**, O. B.

TUNNELING. Bridge and tunnel centres. *See* **McMasters**, John B. **Van Nostrand's science series, No. 20.**

—— Lehrbuch der gesammten Tunnelbaukunst. *See* **Räiha**, Franz.

—— Practical. *See* **Simms**, F. W.

—— Praktischer Tunnelbau. *See* **Lorenz**, Alfred.

—— Der Tunnel-Bau. Vorlesungen über Tunnel-Baugehalten. *See* **Schoen**, Johann G.

—— Tunnel-Baumethode in Eisen. *See* **Räiha**, F.

TUNNELS, Specimens of. *See* **Duggan**, George.

—— Traforo delle Alpi, tra Bardonnèche e Modane. *See* **Traforo.**

Tunner, Ludwig von. Das Eisenhüttenwesen der Vereinigten Staaten von Nordamerika; illustr. von. *See* **Tunner**, P. von.

Tunner, Peter von. Das Eisenhüttenwesen der Vereinigten Staaten von Nordamerika. Beurtheilt nach einem im Auftrage des k. k. Ackerbau-Ministeriums vorgenommenen Besuche der Centennial-Ausstellung in Philadelphia und der vorzüglicheren Eisenhütten nördlich von New York. Mit Tafeln und einer näheren Erläuterung derselben von Ludwig von Tunner. 8°. *Wien*, 1877.

—— Das Eisenhüttenwesen in Schweden. Beleuchtet nach einer Bereitung der vorzüglichern Eisenwerke daselbst im Jahre 1857. 8°. *Freiberg*, 1858.

—— Gemeinfassliche Darstellung der Stabeisen- und Stahlbereitung in Frischherden in den Ländern des Vereins zur Beförderung und Unterstützung der Industrie und Gewerbe in Innerösterreich, dem Lande ob der Enns und Salzburg. Oder: Der wohlunterrichtete Hammermeister. Hrsg. von der Direction des Vereins. 8°. *Gratz*, 1846. 2d ed. 2 Bde. *Illus.* 1858.

—— Ueber die Walzenkaliberirung für die Eisenfabrikation. 8°. *Leipsig*, 1867.

—— Wärmeverhältnisse des Eisenhohofenprozesses; übersetzt von. *See* **Akerman**, Richard.

Tuomey, M., and **Holmes**, F. S. Pleiocene fossils of South Carolina; containing descriptions and figures of the polyparia, echinodermata, and mollusca. 4°. *Charleston, S. C.*, 1857.

TURBINES. Construction of the turbine, or horizontal water-wheel. *See* **Cullen**, W.

—— Example of the turbine wheel, by J. B. Francis. *See* **Tredgold**, T. **Steam engine, 2d series, v. 3.**

—— Principes de la construction des turbines d'après une nouvelle méthode. *See* **Vallet**, Lucien.

—— Tests of turbine water wheels. *See* PHILADELPHIA. **Internat. exhib. 1876, Group **.**

Digitized by Google

TURBINES. Theorie der Turbinen. *See* **Schubert**, J. A.

——— Theorie und Bau der Rohrturbinen. *See* **Rittinger**, P.

——— Theorie und Bau der Turbinen und Ventilatoren. *See* **Redtenbacher**, F.

——— Turbine water wheel. *See* Stillwell and Bierce manufacturing co.

——— Die Turbinen oder horizontalen Wasserräder. *See* **Harzer**, F. **187 Neuer Schauplatz der Künste.**

TURF. Die Compression des Torfes und der Braunkohle, etc. *See* **Leo**, Wilhelm.

Turgan, J. Les grandes usines de France. Tableau de l'industrie française au 19e siècle. T. 1–3. roy. 8°. *Paris*, 1861–63.

TURKEY. Manners, customs and dresses. *See* **Castellan**, A. L.

——— Türkei. Von Carl Sax. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Turnbull, John, *jr.* A short treatise on the compound steam engine, with a new method of finding the relative areas of the two cylinders. *Illus.* 18°. *New York*, 1874. **Van Nostrand's science series, No. 8.**

Turnbull, Laurence. The electro-magnetic telegraph: with an historical account of its rise, progress and present condition. Also suggestions in regard to insulation, and protection from the effects of lightning: together with an appendix, containing several important telegraphic decisions and laws. 2d ed. rev. *Illus.* 8°. *Philadelphia*, 1853.

——— Lectures on the electro-magnetic telegraph, with an historical account of its rise and progress; containing a list of the number of telegraphic lines of the world. roy. 8°. *Philadelphia*, 1852.

Turnbull, William. An essay on the air-pump and atmospheric railway; containing formulæ and rules for calculating the various quantities contained in Robert Stephenson's report on atmospheric propulsion. 16°. *London*, 1847.

——— An essay, theoretical and practical, on the construction of the five architectural sections of cast iron beams generally employed as girders, bressummers, and other horizontal supports for buildings, etc. 8°. *London*, 1833.

Turner, Edward. The oily acids; being the first supplement to the 7th ed. of Turner's chemistry, by Justus Liebig and William Gregory. 8°. *London*, 1841.

Turner, Thomas. Copyright in design, in art, and manufactures. 8°. *London*, 1849.

——— The law of patents and registration of invention and design in manufacture, with statutes, forms, and rules. 8°. *London*, 1851.

TURNING and mechanical manipulation. *See* **Holtzapfel**, Carl.

——— Art du tourneur mécanicien, par Hulot. *See* PARIS. **Acad. des sc.; arts et métiers, v. 20.**

——— Der Drechsler; oder praktischer Lehrbegriff der gemeinen und höhern Drehkunst. *See* **Geissler**, J. G.

——— Die Drehkunst. *See* **Drehkunst. 15 Neuer Schauplatz der Künste.**

——— Eccentric circular. *See* **Ibbetson**, John Holt.

——— The handbook of. *See* **Handbook.**

——— Handbuch der Drehkunst. *See* **Seliger**, C.

——— Manuel du tourneur. *See* **Bergeron**, L. E.

——— Manuel du tourneur. *See* **Dessables**, —. **49 Manuels Roret.**

——— Practice of hand turning in wood, ivory, shell, etc. *See* **Campin**, Francis.

——— Principes de l'art du tourneur. *See* **Desormeaux**, A. O. P.

Turnor, Hatton. Astra Castra. Experiments and adventures in the atmosphere. 4°. *London*, 1865.

TURRETS, Comparison between Coles' and Ericsson's. *See* **Coles**, C. B.

——— Revolving. Vorschläge zu gepanzerten Drehkuppeln. *See* **Piron**, F. P. J.

TUSCANY. Rapporto della pubblica esposizione dei prodotti della Toscana, 1850. *See* FLORENCE.

Tuthill, *Mrs.* L. C. History of architecture from the earliest times; its present condition in Europe and the United States; with a biography of eminent architects, and a glossary of architectural terms. roy. 8°. *Philadelphia*, 1848.

Tuttle, Hudson. The origin and antiquity of physical man, scientifically considered. 12°. *Boston*, 1866.

Digitized by Google

Twerdy, Emil. Papier-Industrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

Twining, Alexander C. The manufacture of ice on a commercial scale and with commercial economy, by steam or water power. 8°. *New Haven, Conn.*, 1857.

Twisden, J. F. Planes, spherical trigonometry, series, logarithms and mensuration. *See* **Young,** J. R., and others. **Orr's circle of the sciences, v. 8.**

Tyler, Ignatius. Case of Brooks et al. vs. Fiske and Norcross. *See* **Brooks,** A. L.

Tyler, Samuel. Memoir of Roger Brooke Taney, chief justice of the supreme court of the United States. 8°. *Baltimore*, 1872.

—— The progress of philosophy in the past and in the future. 2d ed. 12°. *Philadelphia*, 1868.

Tymms, W. R. Art of illuminating as practised in Europe from the earliest times. Illustrated by borders, initial letters, and alphabets, selected and chromolithographed by. With an essay and introduction by M. D. Wyatt. 8°. *London*, 1860.

—— and **Wyatt,** O. D. The art of illuminating as practiced in Europe from the earliest times. roy. 8°. *London.*

Tyndall, John. Contributions to molecular physics, in the domain of radiant heat. roy. 8°. *New York*, 1873.

—— Crystalline and molecular forces. *See* **Science lectures for the people, series 6.**

—— Faraday as a discoverer. 8°. *London*, 1868.

—— The forms of water in clouds, rain, rivers, ice and glaciers. 12°. *New York*, 1872. **International scientific series, v. 1.**

—— Fragments of science for unscientific people. A series of detached essays, lectures, and reviews. 12°. *New York*, 1871.

—— The glaciers of the Alps; a narrative of excursions and ascents, an account of the origin and phenomena of glaciers, and an exposition of the physical principles to which they are related. *Illus.* 8°. *London*, 1860. [?].

—— Heat considered as a mode of motion. *Illus.* 8°. *New York*, 1863.

—— Lessons in electricity at the Royal institution, 1875–76. 12°. *New York*, 1877.

Tyndall, John. Light and electricity; notes of two courses of lectures before the Royal institution of Great Britain. 8°. *New York*, 1871.

—— On radiation. The 'Rede' lecture, delivered in the senate house, before the University of Cambridge, England, on Tuesday, May 16, 1865. 12°. *New York*, 1865. pp. 48.

—— Scientific addresses. 1. The methods and tendencies of physical investigation. 2. Haze and dust. 3. The scientific use of the imagination. 12°. *New Haven, Conn.*, 1870. **University series, No. 5.**

—— Sound. A course of eight lectures delivered at the Royal institution of Great Britain. 12°. *New York*, 1867.

—— Sound. 3d ed. 8°. *London*, 1875.

TYPE founding. Handbuch der Schriftgiesserei. *See* **Henze,** A. **138 Neuer Schauplatz der Künste.**

—— —— Journal für Schriftgiesserei u. s. w. *See* **Journal** für Buchdruckerkunst.

—— —— Treatise on printing and. *See* **Hansard,** T. C.

TYPES of mankind; or, ethnological researches. *See* **Nott,** J. C., and **Gliddon,** G. R.

TYPES. Specimen book. *See* **Trow,** John F.

—— Specimen of fonts of type, etc. *See* **Bruce,** George.

—— Specimens, Farmer and Little's. *See* Farmer.

—— Specimens of printing types. *See* Bruce and co.

—— Specimens of printing types, ornaments, borders, etc. *See* Hagar and co.

—— Supplementary specimens of wood-type, etc. *See* **Webb,** E. R.

TYPHO-malarial fever. By J. J. Woodward. *See* UNITED STATES. **War department.**

TYPHOID fever, and its homœopathic treatment. *See* **Rapou,** Augustus.

TYPOGRAPHY. Encyclopædia of typographical anecdote. *See* **Timperley,** C. H.

—— Manuel de typographie. *See* **Frey,** A. **32 Manuels Roret.**

—— Typographia, or the printers' instructor. *See* **Johnson,** John.

TYROL. Ferdinandeum. Beiträge zur Geognosie Tirols. Mitgetheilt von Adolf Pichler. Mit einer Karte und Profilen.

Digitized by Google

TYROL—Continued.
8°. *Innsbruck*, 1859. [Forms Hefte 8–9, 3te F., of 'Zeitschrift des Ferdinandeums'.]
——— ——— Berichte des Verwaltungs-Ausschusses; 28ter, 29ter, über die Jahre 1857–1861. 8°. *Innsbruck*, 1860–62.
——— ——— Rechnungs-Ausweis und Personalstand am 1. Jänner 1863. 8°. *Innsbruck*, 1863. pp. 32.
——— ——— Urkundliche Beiträge zur Geschichte des deutschen Ordens in Tirol. Von P. Justinian Ladurner. 8°. *Innsbruck*, 1861. [Forms Hefte 10, 11, 3te F., of 'Zeitschrift des Ferdinandeums'.]
——— ——— Zeitschrift des Ferdinandeums für Tirol und Vorarlberg. Hrsg. von dem Verwaltungs-Ausschusse desselben. 3te Folge. Hefte 8–20. 8°. *Innsbruck*, 1859–76——.
Tyson, James L. Diary of a physician in California, with the results of actual experience, including notes of the journey by land and water. 8°. *New York*, 1850.
Ufford and co. Coin priced catalogue, for 1868; showing prices paid by coin dealers for American and foreign coins, when in good condition. 24°. *West Troy*, 1868. pp. 8.
UINTA mountains, Report on the geology of. By J. W. Powell. *See* UNITED STATES. **Interior** department.
ULTRAMARINE. Ultramarin-Fabrikation. *See* **Fürstenau,** Carl.
UMBRELLAS. Fabrikation der Regen- und Sonnenschirme. *See* **Schmied,** C. **126 Neuer Schauplatz der Künste.**
——— parasols and walking sticks. **Abridgments English Patents, No. 47.**
UNDER clothing. Fertige Kleider. Wäsche. Von Josef Migotti. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**
——— draining, A practical essay on the most effectual modes of. *See* **Wiggins,** John.
UNDERTAKER'S goods, Catalogue of. *See* Crane, Breed and co.
Ungewitter, G. G. Plans and designs for Gothic furniture. fol. *London*, 1858.
UNITED STATES. An American almanac. *See* **Spofford,** Ainsworth R.
——— Archæology of. By S. F. Haven. **Smiths'n contrib., v. 8.**
——— Artillery for land service. *See* **Mordecai,** A.
UNITED STATES. Boat armament of the navy. *See* **Dahlgren,** J. A.
——— Botany of the northern. *See* **Gray,** Asa.
——— Bridges, etc., of the U. S. railroads. *See* **Duggan,** G.
——— Canals of. Die Wasserstrassen in den Vereinigten Staaten. *See* **Mosler,** C.
——— Centennial commission. International exhibition, 1876. Official catalogue. Main building and annexes. Department 1. Mining and metallurgy; 2. Manufactures; 3. Education and science; 3d rev. ed. 4. Art; 7th rev. ed. 5. Machinery; 3d rev. ed. 6. Agriculture. 7. Horticulture, 2d rev. ed. [4 parts bound in 1.] 8°. *Philadelphia*, [1876–77].
——— Central committee on the exhibition of industry of all nations, to be held in London, 1851. 8°. *Washington*, 1850. pp. 32.
——— Commerce of, and the Mediterranean sea-ports. *See* **Baker,** J. M.
——— Commerce of the, 1820–1856. *See* **Homans,** J. S.
——— Congress. American archives. 4th series. Containing a documentary history of the English colonies in North America, from the king's message to parliament, March 7, 1774, to the declaration of independence by the United States. By Peter Force. Published under authority of an act of congress. v. 1–6. fol. *Washington*, 1837–46.
——— ——— American archives. 5th series. Containing a documentary history of the United States of America, from the declaration of independence, July 4, 1776, to the definitive treaty of peace with Great Britain, Sept. 3, 1783. By Peter Force. v. 1. fol. *Washington*, 1848.
——— ——— American state papers. Documents, legislative and executive, of the congress of the United States. v. [1]. From the first session of the first, to the second session of the tenth congress, inclusive: commencing March 3, 1789, and ending March 3, 1809. v. [2]. From the first session of the eleventh to the second session of the seventeenth congress, inclusive: commencing May 22, 1809, and ending March 3, 1823. Selected and edited under authority of congress, by Walter Lowrie and Walter S. Franklin. fol. *Washington*, 1834.

Digitized by Google

UNITED STATES. Congress. Bill to amend the several acts now in force in relation to the patent office. fol. *Washington*, 1857. pp. 8.

——— ——— Charges against the commissioner of patents, Mar. 2d, 1863. *n. t. p.* 8°. [*Washington*, 1863.]

——— ——— The cholera epidemic of 1873. 8°. *Washington*, 1875. [Reports from the secretaries of treasury and war.]

——— ——— Congressional directory. From the 1st session of the 36th to the 45th congress. 8°. *Washington*, 1860–77. [Set imperfect.]

——— ——— Congressional record: containing the proceedings and debates of the 43d congress. 3 v. [v. 1, Record of special session of the senate, Mar. 4–26, 1873. v. 2, in 6 parts, first session; v. 3, in 3 parts, second session of 43d congress.] 4°. *Washington*, 1874–75.

——— ——— Duties on imports. June 17, 1842, submitted to the House. Tables showing the rates of duties imposed by the tariff acts of 1816, 1824, 1828, and 1832; the rates of duties proposed to be presented at the present session; also, the quantity and foreign cost and charges of the articles enumerated in the tables, imported in 1840, etc. To which are appended the tariff laws from 1789–1833, with the votes in each house of congress thereon. 8°. *Washington*, 1842.

——— ——— Library of congress. Alphabetical catalogue of authors. 8°. *Washington*, 1864.

——— ——— ——— Alphabetical catalogue of subjects. 2 v. 8°. *Washington*, 1869.

——— ——— ——— Catalogue, June 30, 1849. 8°. [*Washington.*] *n. t. p.*

——— ——— ——— ——— Additions made to the library of congress from Dec. 1, 1851–Dec. 1, 1866. [Annual supplement.] 8°. *Washington*, 1852–66.

——— ——— ——— ——— Additions made to the library of congress from Dec. 1, 1866–Dec. 1, 1867; Dec. 1, 1867–Dec. 1, 1868; Dec. 1, 1868–Dec. 1, 1869; Dec. 1, 1869–Dec. 1, 1870; 1871; 1873–75. 6 v. imp. 8°. *Washington*, 1868–76.

——— ——— ——— Catalogue of the law department. By Charles H. W. Meehan. 8°. *Washington*, 1860.

——— ——— Report from the committee on foreign affairs, April 14, 1842. Colonial trade, Great Britain. 8°. *n. t. p.*

UNITED STATES. Congress. Report of the committee, June 7, 1844. Interference of the executive in the affairs of Rhode Island. 8°. [*Washington*, 1845.] *n. t. p.*

——— ——— Report of the explorations and surveys to ascertain the most practicable and economical route for a railroad from the Mississippi river to the Pacific. v. 1–12. [v. 12 b'd in 2.] 4°. *Washington*, 1855–60.

——— ——— Report on steam carriages, by a select committee of the house of commons, Great Britain; reprinted by order of the house of representatives. 8°. *Washington*, 1832.

——— ——— Report on the trade and commerce of the British North American colonies with the United States and other countries; from 1829–50. Presented to the senate by Thomas Corwin. 8°. *Washington*, 1851.

——— ——— Reports and documents upon the subject of the explosion of steamboat boilers. 8°. *Washington*, 1833[–44].

——— ——— Reports of the regents of the Smithsonian institution to. *See* **Smithsonian.**

——— ——— Revised statutes, passed by the 1st session of the 43d congress, 1873–'74. With an appendix, containing 'An act to correct errors and supply omissions.' roy. 8°. *Washington*, 1875.

——— ——— Revised statutes relating to the District of Columbia and post-roads. Passed at the first session of the 43d congress, 1873–'74; with the public treaties in force, Dec. 1, 1873. roy. 8°. *Washington*, 1875.

——— ——— Statutes at large from the organization of the government in 1789 to 1873. Ed. by Richard Peters and George P. Sanger. v. 1–19. 8°. *Boston*, 1845–77——.

——— ——— Trial of Andrew Johnson, president of the United States, before the senate, on articles of impeachment exhibited by the house of representatives. roy. 8°. *Washington*, 1868.

——— Cotton manufacture of. *See* **Montgomery, J.**

——— Cruise of the Dolphin. *See* **Lee, S. P.**

——— Department of agriculture. Reports of the commissioner of agriculture; from 1862–73. 8°. *Washington*, 1862–74——.

Digitized by Google

UNITED STATES. Department of agriculture. Report of the commissioner of agriculture on the diseases of cattle in the United States. 4°. *Washington*, 1871.

——— Department of the interior. Bureau of education. Circulars of information; for 1871–74. 3 v. 8°. *Washington*, 1871–75——.

——— ——— ——— Public libraries in the United States, their history, condition and management. Special report, in 2 parts. 8°. *Washington*, 1876.

——— ——— ——— Reports of the commissioner of education, with circulars and documents accompanying the same; submitted to the senate and house of representatives, from 1868 to 1875. 8°. *Washington*, 1868–75——.

——— ——— Blue book. Register of officers and agents, civil, military, and naval, in the service of the United States, showing the state or territory from which each person was appointed to office, the state or country in which each was born, and the compensation, pay and emoluments given to each; together with the names and compensation of all printers employed by congress or any department or officer of the government. Compiled and printed under the direction of the secretary. 1861–75, biennial. 8°. *Washington*, 1862–76. [Previously prepared under Department of state, which see.]

——— ——— Census bureau. 6th census. Statistics of the United States as collected and returned by the marshals of the several judicial districts. l. fol. *Washington*, 1841.

——— ——— ——— 6th and 7th census. Statistics of the 3d congressional district of Louisiana, compiled from the United States census returns of 1840 and 1850. pp. 14. *n. t. p.*

——— ——— ——— 7th census, for 1850; with an introduction, embracing the aggregate tables for the United States compared with every previous census since 1790. By J. D. B. De Bow, superintendent. 4°. *Washington*, 1853.

——— ——— ——— 7th census. Reports of the superintendent of the census, for Dec. 1, 1851 and 1852. Printed by order of the house of representatives. *Washington*, 1853.

——— ——— ——— 8th census, for 1860. By Joseph C. G. Kennedy, superintendent. Compiled from the original returns. 2 v. 4°. *Washington*, 1864.

——— ——— ——— ——— Report. By Joseph C. G. Kennedy. 8°. *Washington*, 1862.

——— ——— ——— 9th census, for 1870. 3 v. v. 1. Statistics of the population of the United States, June 1st, 1870. v. 2. Mortality of the United States at the censuses of 1870–60–50. v. 3. Statistics of the wealth and industry of the United States in 1870. Compiled from original returns, by F. A. Walker. 4°. *Washington*, 1872.

——— ——— ——— ——— Compendium by F. A. Walker, commissioner; pursuant to a concurrent resolution of congress, and under direction of the secretary of the interior. 8°. *Washington*, 1872.

——— ——— Geological and geographical survey of the Rocky Mountain region. J. W. Powell, geologist in charge. Contributions to North American ethnology. v. 1. Tribes of the extreme northwest, by W. H. Dall. Tribes of western Washingington and northwestern Oregon, by George Gibbs. v. 2. Tribes of Oregon. v. 3. Tribes of California, by Stephen Powers. Appendix. Linguistics, by J. W. Powell. 4°. *Washington*, 1877–78.

——— ——— ——— Preliminary report on the paleontology of the Black hills; containing descriptions of new species of fossils from the potsdam, jurassic, and cretaceous formations of the Black hills of Dakota. By R. P. Whitfield. 8°. *Washington*, 1877. pp. 49.

——— ——— ——— Report for 1877, with map. By J. W. Powell. 8°. *Washington*, 1877. 19 pp.

——— ——— Geological and geographical survey of the territories. Second division. J. W. Powell, geologist in charge. Report on the geology of the eastern portion of the Uinta mountains, and a region of country adjacent thereto. With atlas. By J. W. Powell. 4°. *Washington*, 1876.

——— ——— ——— Report on the geology of the Henry mountains, by G. K. Gilbert. 4°. *Washington*, 1878.

——— ——— Geological and geographical survey of the territories. F. V. Hayden, geologist in charge. 8° and 4°. *Washington*, 1867–77——.

Digitized by Google

UNITED STATES. Dept. of the int.—Cont'd.

CONTENTS.

Annual reports.

1, 2, and 3. For 1867, 1868, and 1869; embracing Nebraska, Colorado, and New Mexico. 8°. 1873.

4. Preliminary report for 1870; embracing Wyoming and contiguous territories. 8°. 1872.

5. Preliminary report for 1871; embracing Montana and adjacent territories. 8°. 1872. Supplement to 5th annual report, on fossil flora. By Leo Lesquereux.

6. For 1872; embracing Montana, Idaho, Wyoming, and Utah. 8°. 1873.

7. For 1873; embracing Colorado. 8°. 1874.

8. For 1874; embracing Colorado and adjacent territories. 8°. 1876.

9. For 1875; embracing Colorado and a part of adjacent territories.

Final report of Nebraska and adjacent territories, 8°. 1872.

Bulletins.

Vol. 1. [First series, 1874.]

No. 1. List of members and colaborators of the survey for 1873.

List of the publications of the geological survey of the territories.

Report on the stratigraphy and pliocene vertebrate paleontology of northern Colorado. By Edward D. Cope.

No. 2. Review of the vertebrata of the cretaceous period found west of the Mississippi river. By Edward D. Cope.

Supplementary notices of fishes from the freshwater tertiaries of the Rocky mountains. [By Edward D. Cope.]

On the general characters and the relation of the flora of the Dakota group. By Leo Lesquereux.

Descriptions of some new orthoptera, and notes on some species but little known. By Cyrus Thomas.

Notes on the Rocky mountain ranges in Colorado territory. [By James T. Gardner.]

[Second series, 1875–76.]

No. 1. (1) On the fishes of the tertiary shales of the South park [Colorado]. By E. D. Cope.

(2) On the cranial and dental characters of mephitinæ, with description of mephitis frontata, n. sp. foss. By Elliott Coues.

(3) Ancient ruins in southwestern Colorado. By W. H. Jackson.

(4) Note on some fossils from near the eastern base of the Rocky mountains, west of Greeley and Evans, Colorado, and others from about two hundred miles farther eastward, with descriptions of a few new species. By F. B. Meek.

No. 2. (1) Monograph of the genus leucosticte, Swainson; or, gray-crowned purple finches. By Robert Ridgway.

(2) The cranial and dental characters of geomyidæ. By Elliott Coues.

(3) Synopsis of insectivorous mammals. By Theodore Gill.

(4) Report on the natural history of United States geological and geographical survey of the territories, 1874. By Ernest Ingersoll.

UNITED STATES. Dept. of the int.—Cont'd.

No. 3. (1) Means of communication between Denver and the San Juan mines. By A. D. Wilson, topographer directing.

(2) Report on the mines and geology of the San Juan country. By F. M. Endlich.

(3) Report on the topography of the San Juan country. By Franklin Rhoda.

(4) Note on some peculiar forms of erosion in eastern Colorado. By F. V. Hayden.

No. 4. (1) Notes on the surface features of the Colorado or front range of the Rocky mountains. By F. V. Hayden.

(2) The tertiary physopoda of Colorado. By Samuel H. Scudder.

(3) Outlines of a natural arrangement of the falconidæ. By Robert Ridgway.

No. 5. (1) A review of the fossil flora of North America. By Leo Lesquereux.

(2) Notes on the geology of some localities near Cañon city, Frémont co., Col. By S. G. Williams.

(3) Some account, critical, descriptive, and historical, of sapus hudsonius. By Elliott Coues.

(4) On the breeding habits, nest, and eggs of the white-tailed ptarmigan (lagopus leucurus). By Elliott Coues.

(5) List of hemiptera of the region west of the Mississippi river, including those collected during the Hayden explorations of 1873. By P. R. Uhler.

(6) On some new species of fossil plants from the lignitic formations. By Leo Lesquereux.

(7) New species of fossil plants from the cretaceous formation of the Dakota group. By Leo Lesquereux.

(8) Notes on the lignitic group of eastern Colorado and portions of Wyoming. By F. V. Hayden.

(9) On the supposed ancient outlet of Great Salt lake. By A. S. Packard, jr.

No. 6. (1) An account of the various publications relating to the travels of Lewis and Clarke, with a commentary on the zoölogical results of their expedition. By Elliott Coues.

(2) Notice of a very large goniatite from eastern Kansas. By F. B. Meek.

(3) Fossil orthoptera from the Rocky mountain tertiaries. By Samuel H. Scudder.

(4) Studies of the American falconidæ. By Robert Ridgway.

(5) Index. An index to all preceding bulletins, with title, table of contents, etc.

Vol. 2.

No. 1. (1) A notice of the ancient ruins of southwestern Colorado, examined during the summer of 1875. By W. H. Holmes.

(2) A notice of the ancient ruins in Arizona and Utah lying about the Rio San Juan. By W. H. Jackson.

(3) The human remains found among the ancient ruins of south-western Colorado and New Mexico. By Emil Bessels.

(4) Ancient art in northwestern Colorado. By E. A. Barber.

Digitized by Google

UNITED STATES. Dept. of the int.—Cont'd.

(5) Bead ornaments, employed by the ancient tribes of Utah and Arizona. By E. A. Barber.

(6) Language and utensils of the modern Utes. By E. A. Barber.

(7) Fossil coleoptera from the Rocky mountain tertiaries. By Samuel H. Scudder.

No. 2. (1) Studies of the American falconidæ. By Robert Ridgway.

(2) Ornithology of Guadeloupe island. By Robert Ridgway.

No. 3. (1) Notes descriptive of some geological sections of the country about the headwaters of the Missouri and Yellowstone rivers. By F. V. Hayden.

(2) Notes on the tertiary and cretaceous periods of Kansas. By B. F. Mudge.

(3) Notes in relation to the accompanying contour-map of the United States. By Henry Gannett.

(4) The flora of southwestern Colorado. By T. S. Brandegee.

(5) Brief synopsis of North American earwigs, with an appendix on the fossil species. By Samuel H. Scudder.

(6) List of the orthoptera collected by Dr. A. S. Packard in Colorado and the neighboring territories, during the summer of 1873. By Samuel H. Scudder.

(7) Notice of a small collection of butterflies made by Dr. A. S. Packard in Colorado and Utah, in 1875. By Samuel H. Scudder.

(8) Notes on the grammar of the Nez Percés language. By George Ainslie.

No. 4. (1) Notes on the geology of northeastern New Mexico. By O. St. John.

(2) Geographical variation among North American mammals, especially in respect to size. By J. A. Allen.

(3) Sexual, individual, and geographical variation in leucosticte tephrocotis. By J. A. Allen.

(4) Descriptions and illustrations of fossils from Vancouver's and Sucia islands, and other northwestern localities. By F. B. Meek.

(5) Note on the new genus uintacrinus. By F. B. Meek.

Vol. 3, 1877.

No 1. (1) A calendar of the Dakota nation. By Garrick Mallery.

(2) Researches in the kjökkenmöddings and graves of a former population of the coast of Oregon. By Paul Schumacher.

(3) Researches in the kjökkenmöddings of a former population of the Santa Barbara islands and adjacent mainland. By Paul Schumacher.

(4) The Twana Indians of the Skokomish reservation in Washington territory. By M. Eells.

(5) Notes on a collection of noctuid moths made in Colorado in 1875 by A. S. Packard, jr. By Aug. R. Grote.

(6) The tineina of Colorado. By V. T. Chambers.

(7) Notes on a collection of tineid moths made in Colorado in 1875 by A. S. Packard, jr. By V. T. Chambers.

70 C P O

UNITED STATES. Dept. of the int.—Cont'd.

(8) On the distribution of tineina in Colorado. By V. T. Chambers.

(9) New entomostraca from Colorado. By V. T. Chambers.

(10) On a new cave fauna in Utah. By A. S. Packard, jr.

(11) Description of new phyllopod crustacea from the west. By A. S. Packard, jr.

(12) On some artesian borings along the line of the Union Pacific railroad in Wyoming territory. By F. V. Hayden.

No. 2. (13) Western diptera: descriptions of new genera and species of diptera from the region west of the Mississippi, and especially from California. By C. R. Osten Sacken.

(14) Report upon the insects collected by P. R. Uhler during the explorations of 1875, including monographs of the families cydnidæ and saldæ, and the hemiptera collected by A. S. Packard, jr., M. D. By P. R. Uhler.

(15) Descriptions of the aranea collected in Colorado in 1875 by A. S. Packard, jr. By T. Thorell.

No. 3. (16) Comparative vocabulary of Utah dialects. By Edwin A. Barber.

(17) Methods of making stone weapons. By Paul Schumacher.

(18) On a peculiar type of eruptive mountains in Colorado. By A. C. Peale.

(19) Report on the geology of the region of the Judith river, Montana, and on vertebrate fossils obtained on or near the Missouri river. By E. D. Cope.

(20) Paleontological papers No. 1.—Descriptions of unionidæ and physidæ collected by Professor E. D. Cope from the Judith river group of Montana territory during the summer of 1876. By C. A. White.

(21) Paleontological papers No. 2.—Descriptions o new species of unlones and a new genus of fresh-water gasteropoda from the tertiary strata of Wyoming and Utah. By C. A. White.

(22) Paleontological papers No. 3.—Catalogue of the invertebrate fossils hitherto published from the fresh- and brackish-water deposits of the western portion of North America. By C. A. White.

(23) Paleontological papers No. 4.—Comparison of the North American mesozoic and cenozoic unionidæ and associated mollusks with living species. By C. A. White.

(24) Paleontological papers No. 5.—Remarks on the paleontological characteristics of the cenozoic and mesozoic groups as developed in the Green river region. By C. A. White.

(25) Precursory notes on American insectivorous mammals, with descriptions of new species. By Elliott Coues.

(26) Notes on the ornithology of the region about the source of the Red river of Texas, from observations made during the exploration conducted by E. H. Ruffner. By C. A. H. McCauley. Annotated by Elliott Coues.

(27) Catalogue of the land and fresh-water shells of Nebraska. By Samuel Aughey.

Digitized by Google

UNITED STATES. Dept. of the int.—Cont'd.

(28) Notes on the geographical work of the United States geological and geographical survey of the territories. By A. D. Wilson.

No. 4. (29) The first discovered traces of fossil insects in the American Tertiaries. By Samuel H. Scudder.

(30) Description of two species of carabidæ found in the interglacial deposits of Scarboro' heights, near Toronto, Canada. By Samuel H. Scudder.

(31) Report upon the insects collected by P. R. Uhler during the explorations of 1875, including monographs of the families cydnidæ and saldæ, and the hemiptera collected by A. S. Packard, jr. By P. R. Uhler. (Continued.)

(32) Description of cambarus couesi, a new species of crawfish from Dakota. By Thos. H. Streets.

(33) On a carnivorous dinosaurian from the Dakota beds of Colorado. By E. D. Cope.

(34) A contribution to the knowledge of the ichthyological fauna of the Green river shales. By E. D. Cope.

(35) On the genus erisichthe. By E. D. Cope.

Vol. 4, 1878.

No. 1. (1) Notes on the ornithology of the lower Rio Grande of Texas, from observations made during the season of 1877. By George B. Sennett. Edited, with annotations, by Elliott Coues.

(2) Descriptions of fishes from the cretaceous and tertiary deposits west of the Mississippi river. By E. D. Cope.

(3) Descriptions of new tineina from Texas, and others from more northern localities. By V. T. Chambers.

(4) Tineina and their food-plants. By V. T. Chambers.

(5) Index to the described tineina of the United States and Canada. By V. T. Chambers.

(6) Descriptions of noctuidæ, chiefly from California. By A. R. Grote.

(7) A synopsis of the North American species of the genus alpheus. By J. S. Kingsley.

(8) Notes on the mammals of Fort Sisseton, Dakota. By C. E. McChesney. Annotated by Elliott Coues.

(9) Studies of the American herodiones. Part 1. —Synopsis of the American genera of ardeidæ and ciconiidæ; including descriptions of three new genera, and a monograph of the American species of the genus ardea, Linn. By Robert Ridgway.

(10) Notice of the butterflies collected by Dr. Edward Palmer in the arid regions of southern Utah and northern Arizona during the summer of 1877. By Samuel H. Scudder.

(11) Notes on the herpetology of Dakota and Montana. By Elliott Coues and H. C. Yarrow.

(12) On consolidation of the hoofs in the Virginian deer. By Elliott Coues.

(13) On a breed of solid-hoofed pigs apparently established in Texas. By Elliott Coues.

(14) Professor Owen on the pythonomorpha. By E. D. Cope.

UNITED STATES. Dept. of the int.—Cont'd.

Miscellaneous publications.

No. 1. List of elevations west of the Mississippi river. By Henry Gannett. 8°. 1877.

No. 2. Meteorological observations during 1872, in Utah, Idaho, and Montana. Prepared for publication by Henry Gannett. 8°. 1873.

No. 3. Birds of the northwest. Ornithology of the Missouri region. By Elliott Coues. 8°. 1874.

No. 4. Synopsis of the flora of Colorado. By Thomas C. Porter and John M. Coulter. 8°. 1874.

No. 5. Descriptive catalogue of the photographs of the United States geological survey. By W. H. Jackson. 8°. 1875.

No. 6. Meteorological observations made during the year 1873, and the early part of 1874, in Colorado and Montana territories. Prepared by George B. Chittenden. 8°. 1874.

No. 7. Ethnography and philology of the Hidatsa Indians. By Washington Matthews. 8°. 1877.

No. 8. Fur bearing animals. A monograph of American mustelidæ. By Elliott Coues. 8°. 1877.

Monographs.

v. 1. Extinct vertebrate fauna of the western territories. By Joseph Leidy. 4°. 1873.

v. 2. Vertebrata of the cretaceous formations of the west. By E. D. Cope. 4°. 1875.

v. 3. ——.

v. 4. ——.

v. 5. Acrididæ of North America. By Cyrus Thomas. 4°. 1873.

v. 6. Cretaceous fossil flora of the western territories. By Leo Lesquereux. 4°. 1874.

v. 7. Tertiary fossil flora of the western territories. By Leo Lesquereux. 4°. 1878.

v. 8. ——.

v. 9. Invertebrate cretaceous and tertiary fossils. By F. B. Meek. 4°. 1876.

v. 10. Geometrid moths, or phalænidæ, of the United States. By A. S. Packard, jr. 4°. 1876.

v. 11. North American rodentia. By Elliott Coues and Joel Asaph Allen. 4°. 1877.

Unclassified.

Bulletin of the United States entomological commission. Nos. 1, 2. 8°. 1877.

Catalogue of the publications of the United States survey of the territories. 8°. 1877.

—— —— Indian bureau. A compilation of all the treaties between the United States and the Indian tribes, now in force as laws. 8°. *Washington*, 1873.

—— —— —— History, condition and prospects of the Indian tribes; under direction of. *See* **Schoolcraft, H. R.**

—— —— —— Treaties between the United States and the Indian tribes, from 1778–1837; with a table of contents, compiled and printed under the direction and supervision of the commissioner of Indian affairs. 8°. *Washington*, 1837.

Digitized by Google

UNITED STATES. Department of the interior. Land office. Report on the geology and topography of a portion of the Lake Superior land district, in the state of Michigan. By J. W. Foster and J. D. Whitney. 2 parts. Part 1. Copper lands. 8°. *Washington*, 1850.

——— ——— Library. Alphabetical catalogue. 8°. *Washington*, 1875. Also ed. 1877,

——— ——— National museum. Bulletins. 8°. *Washington*, 1875–77.

CONTENTS.

No. 1. Check-list of North American batrachia and reptilia. By E. D. Cope.
Nos. 2, 3. Contributions to the natural history of Kerguelen island. Part 1, 2. By J. H. Kidder.
No. 4. Birds of southwestern Mexico, collected by Francis E. Sumichrast. Prepared by George N. Lawrence.
No. 5. Catalogue of the fishes of the Bermudas. By G. Brown Goode.
No. 6. Classification of the collection, to illustrate the animal resources of the United States. By G. Brown Goode.
No. 7. Contributions to the natural history of the Hawaiian and Fanning islands and Lower California. By Thomas H. Streets.
No. 8. Index to the names which have been applied to the subdivisions of the class brachiopoda. By W. H. Dall.
No. 9. Contributions to North American ichthyology, No. 1. By David S. Jordan.
No. 10. Contributions to North American ichthyology, No. 2. By David S. Jordan.

UNITED STATES. Department of the interior. Patent office. *See* **Patent** cases and decisions, **Patent** laws, and **Patents** and other privileges.

——— ——— ——— Application of Cyrus H. McCormick for the extension of his patent for an improvement in reaping machines. 8°. *Washington*, 1859.

——— ——— ——— Catalogue showing the location of every model of patented inventions in the new hall of the patent office, with the class to which it belongs; the number of every shelf, and of models of each kind; with general information for inventors, patentees, and those interested in patented inventions; a list of the officers and clerks of the patent office, with the respective classes to which the examiners are attached, and duties of the clerks; with names and residences of the most ingenious inventors. Compiled by Alfred Hunter. 8°. *Washington*, 1855.

——— ——— ——— Catalogue showing the subject or title of every patent granted by the government prior to the year 1857; and the number issued under each title. Also, tables showing the number granted to the residents of each state, territory and country separately; and the aggregate number issued. By J. S. Brown. 8°. *Washington*, 1857. pp. 36. [2 copies.]

——— ——— ——— Decisions of the commissioner of patents for the years 1869–76. 8 v. 8°. *Washington*, 1869–77——.

——— ——— ——— Digest of patents issued by the United States from 1790–1839: published by act of congress, under the superintendence of the commissioner, Henry L. Ellsworth. To which is added the present law relating to patents. 8°. *Washington*, 1840.

——— ——— ——— Digest of patents, issued by the United States, including the years 1839, '40, and '41. 8°. *Washington*, 1842.

——— ——— ——— Laws of the United States relating to patents and the patent office; decisions of the courts of the United States, and of the several states relating to the same subjects; also, the opinions of Hon. William Cranch, upon appeals from the decisions of the commissioner of patents; to which is added a brief abstract of the patent laws of foreign countries. Arranged and compiled by the commissioner of patents. 8°. *Washington*, 1848. [6 copies.]

——— ——— ——— List of patents granted by the United States from April 10, 1790, to Dec. 31, 1836; with an appendix containing reports on the condition of the patent office in 1823, 1830, and 1831. 8°. *Washington*, 1872.

——— ——— ——— Lists of patents for inventions and designs, issued by the United States, from 1790 to 1847; with the patent laws and notes of decisions of the courts for the same period; compiled and published under the direction of Edmund Burke. 8°. *Washington*, 1847.

——— ——— ——— Meteorological observations, made under the direction of the United States patent office and the Smithsonian institution, from 1854–1859. 4°. *Washington*, 1861.

——— ——— ——— Official gazette of the United States patent office. With annual indices. v. 1–11. 8°. *Washington*, 1872–77——.

——— ——— ——— Report of the commissioner of patents for the year 1837–71. 8°.

Digitized by Google

UNITED STATES. Dept. of the int. Patent office—Continued.

Washington, 1838–76. [Succeeded by 'Official gazette'.]

——— ——— ——— Report of the commissioner of patents to the senate of the United States on the subject of steam boiler explosions. Dec. 30, 1848. *n. t. p.*

——— ——— ——— Subject matter index of patents for inventions, issued by the United States patent office, from 1790–1873, inclusive. Compiled and published under the direction of the commissioner, M. D. Leggett. 3 v. 8°. *Washington*, 1874.

——— ——— Pension office. Pension laws now in force; relative to invalid, navy, revolutionary, and other pensions; the construction placed upon such laws by the war department or attorney general; forms necessary to be followed by applicants for pensions under the several laws, and the bounty laws. 8°. *Washington*, 1849.

——— Department of justice. Digest of the published opinions of the attorneys-general, and of the leading decisions of the federal courts, with reference to international law, treaties, and kindred subjects. [Compiled by J. L. Cadwalader.] Rev. ed. 8°. *Washington*, 1877.

——— Department of the navy. Allowances established for vessels, 1864. 8°. *Washington*, 1865.

——— ——— Bureau of navigation. Magnetism of ships, and the deviations of the compass. A series of papers, by Poisson, G. B. Airy, Archibald Smith, F. J. Evans, W. W. Rundell, etc.; reprinted under the direction of Thornton A. Jenkins, by order of the secretary of the navy. 8°. *Washington*, 1867.

——— ——— Bureau of ordnance. Objects and resources of the naval experimental battery at Annapolis, Maryland. By J. D Marvin. 8°. *Washington*, 1875.

——— ——— ——— Ordnance instruction for the United States navy. Part 1. Relating to the preparation of vessels of war for battle; the duties of officers and others when at quarters. 2. The equipment and manœuvre of boats; exercise of boat howitzers. 3. Ordnance and ordnance stores. 4th ed. 8°. *Washington*, 1866.

——— ——— ——— Ordnance papers. 8°. *Washington* and *Newport, R. I.*, 1871–75.

UNITED STATES. Dept. of the navy. Bureau of ordnance—Continued.

CONTENTS.

The determination of the time of flight of projectiles, etc., by means of the electric clepsydra, from researches in experimental ballistics. By P. Boulengé. Transl. from the French, by J. D. Marvin. *Illus.* 1873. pp. 22.

Dimensions and weights of gun-implements. *Illus.* 1874 pp. 16.

Divisional course of instruction. 1872. pp. 31.

French mitrailleuse; its construction and service. Transl. from the German, by W. M. Folger *Illus.* 1873. pp. 12.

Granulation of gunpowder; its theory and practice. By J. D. Marvin. *Illus.* 1875. pp. 24.

Gunnery notes. 1871. pp. 16.

Gunpowder as an element in the problem of modern ordnance; the influence of density on its explosive action; and the densimeter, its uses and adjustments. *Illus.* 1872. pp. 42.

Instructions for care and preparation of ammunition. *Illus.* 1874. pp. 47.

Instructions for use and care of Gatling guns. Compiled by J. D. Marvin. *Illus.* 1874. pp. 43.

Laboratory notes. 1871. pp. 16.

Landing drill of naval brigade at Key West. *Illus.* 1874. pp. 18.

Lecture on drifting and automatic movable torpedoes, submarine guns and rockets. By F. M. Barber. *Illus.* 1874. pp. 40.

Lecture on galvanic batteries and electrical machines, as used in torpedo operations. Part 1. Galvanic batteries. 2. Frictional and magneto-electric machines. 3. Dynamo-electric machines. By John P. Merrell. *Illus.* 1875.

Lecture on submarine boats and their application to torpedo operations. By F. M. Barber. *Illus.* 1875. pp. 39.

Liquid carbonic acid; its preparation, and the construction of vessels to contain it. By Walter N. Hill. *Illus.* 1875. pp. 37.

Notes on explosions; their application in torpedo-warfare. By Walter N. Hill. *Illus.* 1875.

Notes on the management of the spar torpedo. By H. B. Robeson. 1873. pp. 28.

Notes on torpedo fuzes. By G. A. Converse. *Illus.* 1875. pp. 22.

Organization of landing parties for operations on shore. By Theodore B. Mason. *Illus.* 1875. pp. 13.

Organization of the naval brigade. By W. Very. 1875. pp. 23.

Partial list of cases involving gross carelessness in details of ordnance administration, afloat and ashore. 1875. pp. 8.

Provisional drill of Gatling gun. *Illus.* 1873. pp 16.

Record of United States naval institute. A. H. Harwood, in the chair. The armament of our ships of war. By W. N. Jeffers. v. 1, No. 6. 1874. pp. 16.

Regulations for powder magazines and shell houses. 1874. pp. 34.

Report on spar torpedoes. By Nicol Ludlow. 1875. pp. 7.

Digitized by Google

UNITED STATES. Dept. of the navy—Cont'd.
Report on the Vienna exhibition ordnance and marine material. By W. A. Kirkland. *Illus.* 1874 pp. 39.
Torpedo experiments at Key West. *Illus.* 1874. pp. 17.
The Zapata chronograph; used to determine more than one velocity in the same trajectory. By Francisco Javier Zapata. Transl. from the third Madrid ed. *Illus.* 1875. pp. 18.

UNITED STATES. Department of the navy. Letter from the secretary, in answer to resolutions of the House and Senate in relation to the operations of armored vessels employed in the service of the United States. 8°. [*Washington*, 1864.]

——— ——— Marine hospital. Nomenclature of diseases, prepared for the use of the medical officers of the United States hospital service; by John M. Woodworth, supervising surgeon. 8°. *Washington*, 1874.

——— ——— Register of the commissioned and warrant officers of the navy, of the marine corps, and others. 8°. *Washington*, 1860.

——— ——— Report on American coals. By W. R. Johnson. 8°. *Washington*, 1844.

——— ——— Report of the secretary, in relation to the invention of Thomas S. Easton, for preventing explosions of steam boilers. Being a letter from W. R. Johnson. 8°. *Washington*, 1842. pp. 38. *n. t. p.*

——— ——— Report on interoceanic canals and railroads between the Atlantic and Pacific oceans. By Charles H. Davis. 8°. *Washington*, 1867.

——— ——— Reports and charts of the cruise of the United States brig Dolphin, made under the direction of the navy department. By S. Phillips Lee. 8°. *Washington*, 1854.

——— Post office department. List of post offices in the United States, 1857–1862. 8°. *Washington*, 1857–62.

——— ——— United States official postal guide; containing an alphabetical list of post offices in the United States, with county, state and salary; money order offices, domestic and international; chief regulations of the post office department, instructions to the public, postage tables, arrival and closing of the mails, with other information. Revised and published quarterly. Oct., 1876; Jan., 1877; April, 1877. sm. 8°. *Boston*, 1876–77——.

UNITED STATES. Department of state. Consular regulations. A practical guide for consular officers; also, for merchants, shipowners, and masters of American vessels, in all their consular transactions. 3d ed. rev. 8°. *Washington*, 1868.

——— ——— Consular system; a manual for consuls, and also for merchants, shipowners and masters in their consular transactions; comprising the instructions of the department of state, in regard to consular emoluments, duties, privileges, and liabilities. 8°. *Washington*, 1856. pp. 24.

——— ——— Letter from the secretary, with a list of the names of persons who have invented any new and useful art, machine, manufacture, or composition of matter, or any improvements thereon, to whom patents have been issued for the same. Lists, 1790–1839. fol. 8°. *Washington*, 1811–40.

——— ——— Letter from the secretary, transmitting a list of all patents granted by United States; acts of congress relating thereto; decisions of courts under the same, etc. 8°. *Washington*, 1831.

——— ——— Letter from the secretary, transmitting a report, containing an account of changes and modifications in the commercial systems of other nations, by treaties, duties on imports, and other regulations. 8°. 1842. *n. t. p.*

——— ——— Letter from the secretary, transmitting a statement of the commercial relations of the U. S. with foreign nations. 4°. *Washington*, 1858.

——— ——— Letter from the secretary, transmitting an account of such changes and modifications in the commercial systems of other nations as have come to the knowledge of the department, since the last annual report. 8°. [1843.] *n. t. p.*

——— ——— Register of officers and agents, civil, military and naval, in the service of the United States, with the names, force and condition of all ships and vessels belonging to the United States, and when and where built; with the names and compensation of all printers in any way employed by congress, or any department or officer of the government. Compiled and printed under the direction of the secretary. 1833–59. [Biennial; 1849 missing. From 1861, prepared under interior dept.] 8°. *Washington*, 1834–59.

Digitized by Google

UNITED STATES. Dept. of state—Cont'd.

See, also, UNITED STATES. **Interior** department.

——— ——— Report of the secretary, transmitting a statement from the superintendent of statistics of the commercial relations of the United States with foreign nations, for the year ending Sept. 30, 1856. 4°. *Washington*, 1857.

——— ——— Report on the commercial relations of the United States with all foreign nations. Edmund Flagg, superintendent. 4 v. [v. 3 wanting.] 4°. *Washington*, 1856-57.

——— ——— Report on the commercial relations of the United States with foreign nations; comparative tariffs; tabular statements of the domestic exports; duties on importation of the staple or principal productions of the United States into foreign countries, etc. 8°. *Washington*, 1842.

——— ——— Reports of the commissioners to the Paris exposition, 1867. Published under direction of the secretary of state, by authority of the Senate. Ed. by William P. Blake. 6 v. 8°. *Washington*, 1870.

CONTENTS.

v. 1. Introduction; with selections from the correspondence of Commissioner-General N. M. Beckwith and others.

General survey of the exposition, with a report on the character and condition of the United States section.

Report on the fine arts. By Frank Leslie.

The fine arts applied to the useful arts.

Extract from the report of the international committee on weights, measures and coins.

Bibliography of the Paris exposition, 1867.

General alphabetical index to the reports.

v. 2. The production of iron and steel in its economic and social relations. By Abram S. Hewitt.

Report upon the precious metals; being statistical notices, etc. By William P. Blake.

The progress and condition of several departments of industrial chemistry. By J. Lawrence Smith.

v. 3. Machinery and processes of the industrial arts, and apparatus of the exact sciences. By Frederick A. P. Barnard.

v. 4. Examination of the telegraph apparatus and the processes in telegraphy. By Samuel F. B. Morse.

Steam engineering as illustrated by the Paris universal exposition. By William S. Auchincloss.

Engineering and public works. By William P. Blake.

Béton-Coignet; its fabrication, uses, etc. By Leonard F. Beckwith.

Asphalt and bitumen as applied in construction, etc. By Arthur Beckwith.

UNITED STATES. Dept. of state—Cont'd.

Building, building materials, and methods of building. By James H. Bowen.

Mining and the mechanical preparation of ores. By Henry F. Q. D'Aligny, Huet, Geyler, and Lepainteur.

v. 5. Quantities of cereals produced in different countries compared. By Samuel H. Ruggles.

The quality and characteristics of the cereal products exhibited. By George S. Hazard.

Report on the preparation of food. By W. E. Johnston.

The manufacture of beet-root sugar and alcohol. The manufacture of pressed or agglomerated coal. Photographs and photographic apparatus. Outline of the history of the Atlantic cable. By Henry F. Q. D'Aligny.

Culture and products of the vine, with an appendix upon the production of wine in California. By Wilder, Thomson, Flagg, and Barry.

School-houses, and the means of promoting popular education. By Jacob R. Freese.

Munitions of war exhibited. By Charles B. Norton and W. J. Valentine.

Instruments and apparatus of medicine, surgery, hygiene, etc. By Thomas W. Evans.

Report upon musical instruments. By Paran Stevens.

v. 6. Wool and manufactures of wool. By E. R. Mudge and John L. Hayes.

Report upon cotton. By E. R. Mudge and B. F. Nourse.

Silk and silk manufactures. By Elliot C. Cowdin.

Clothing and woven fabrics. By Paran Stevens.

Report on education. By J. W. Hoyt.

List of the reports in the order of succession in the volumes.

——— ——— Reports of the commissioners to the Vienna exhibition, 1873. Published under the direction of the secretary of state, by authority of Congress. Ed. by Robert H. Thurston. 4 v. 8°. *Washington*, 1876.

CONTENTS.

v. 1. Introduction to the reports.

Report of the chief executive commissioner of the United States. By H. Garretson.

Report on sheep and wool. By J. R. Dodge.

v. 2. Report on chemicals. By J. Lawrence Smith.

On Vienna bread. By E. N. Horsford.

On commercial fertilizers. By Peter Collier.

On photography. By C. A. Doremus.

Medicine and surgery. By Anthony Ruppaner.

Physical apparatus and chemical materials. By Wolcott Gibbs.

Instruments of precision. By C. F. Carpenter.

Instruments of precision. By R. D. Cutts.

Telegraphs and administration. By R. B. Lines.

Telegraphs and apparatus. By David Brooks.

Report on education. By E. Seguin.

Report on education. By J. W. Hoyt.

Digitized by Google

UNITED STATES. Dept. of state—Cont'd.

Report on deaf-mute instruction. By E. M. Gallaudet.

Governmental patronage of art. By E. M. Gallaudet.

Art of printing, and manufactures of paper, etc. By G. W. Silcox.

Government printing. By A. H. Brown.

v. 3. Report on machinery and manufactures, with an account of European manufacturing districts. By Robert H. Thurston.

Report on sewing-machines. By George A. Fairfield.

Civil engineering, public works and architecture. By William Watson.

Report on hydraulic engineering. By Charles Davis.

v. 4. Report on the buildings of the exhibition, and on railroad structures. By Lyman Bridges.

Report on the construction and embellishment of private dwellings in Vienna. By John R. Niernsee.

Report on architecture and the materials of construction. By Nelson L. Derby.

Report on wood-industries. By N. M. Lowe.

Report on the working of stone; and on artificial stones. By Louis J. Hinton.

Report on iron and steel. By William P. Blake

Report on the metallurgy of lead, silver, copper, and zinc. By Howard Painter.

General index of the reports. Ed. by Robert H. Thurston.

——— Department of the treasury. Annual report of the state of the finances, Dec. 1, 1873. By William A. Richardson, secretary. 8°. *Washington*, 1873.

——— ——— Coast survey. Report of the superintendent; showing the progress of the survey during the years 1852–69, 1872, 1873. 20 v. 4°. *Washington*, 1853–73.

——— ——— Communication from the secretary, transmitting the report of Israel D. Andrews, on the trade and commerce of the British North American colonies, and upon the trade of the great lakes and rivers; also, notices of the internal improvements in each state of the Gulf of Mexico and Straits of Florida, and a paper on the cotton crop of the United States. 8°. *Washington*, 1853. Ex. doc. No. 136.

——— ——— Internal revenue. Laws of the United States relating to internal revenue in force Aug. 1, 1866, except where otherwise specially provided; as in relation to distilled spirits, fermented liquors, certain stamp duties, and, in part, to cotton. Prepared under the direction of the commissioner. 8°. *Washington*, 1866.

UNITED STATES. Department of the treasury. Internal revenue. Report of a commission appointed for a revision of the revenue system, 1865–66. David A. Wells, Stephen Colwell, Samuel S. Hayes, commissioners. E. B. Elliott, secretary to the commission. 8°. *Washington*, 1866.

——— ——— ——— Report of the commissioners on the operations of the system for the year ending June 30, 1865. By E. A. Rollins. 8°. *Washington*, 1865.

——— ——— Letter from the secretary, transmitting a report of the Franklin institute, Philadelphia, in relation to the explosion of steam boilers. 8°. [*Washington*, 1836.] *n. t. p.*

——— ——— Light-house board. Annual reports to the secretary of the treasury, for the fiscal year ending June 30, 1872–76. 8°. *Washington*, 1872–76——.

——— ——— ——— [Illustrations of light-houses and United States light-house establishment.] 3 v. fol. *n. t. p.*

——— ——— ——— Report of the officers constituting the board convened to inquire into the condition of the lighthouse establishments of the United States. 8°. *Washington*, 1852.

——— ——— ——— Specifications of Atchafalaya lighthouse, Louisiana. 8°. *Washington*, 1858.

——— ——— Report from the secretary, of the commerce and navigation of the United States, for the year ending Sept. 30, 1839. 8°. *n. t. p.*

——— ——— Report from the secretary, transmitting a statement of the commerce and navigation of the United States, April 10, 1844. 8°. *n. t. p.*

——— ——— Report of a tour of inspection of European lighthouse establishments, made in 1873. By George H. Elliot. 8°. *Washington*, 1874.

——— ——— Report of the secretary, communicating a report of scientific investigations relative to the chemical nature of saccharine substances, and the art of manufacturing sugar; by R. S. McCulloh. March 1, 1847. 8°. [*Washington*, 1847.] *n. t. p.*

——— ——— Report of the secretary, transmitting a report from the register of the treasury, of commerce and navigation of the United States, for the year ending June 30, 1851. 8°. [*Washington*, 1852.] *n. t. p.*

Digitized by Google

UNITED STATES. Department of the treasury. Report of the secretary upon the condition of the light-houses, beacons, buoys, and navigation, upon the coasts of Maine, New Hampshire and Massachusetts; Feb. 25, 1843. *n. t. p.*

——— ——— Reports of the secretary, of scientific investigations in relation to sugar and hydrometers; made under the superintendence of A. D. Bache. By R. S. McCulloh. 8°. *Washington*, 1848.

——— Department of war. Bureau of engineers. Papers on practical engineering; prepared by the officers of the United States corps of engineers. [The later numbers are called: Professional papers, etc.] 8°. [*Washington*], 1841-77——.

CONTENTS.

No. 1. Bitumen. 1841. By H. W. Halleck.
2. Sea-wall on Lovell's island. 1844. By S. Thayer.
3. Sustaining walls. From a memoir of J. V. Poncelet. 2d ed. 1854. By D. P. Woodbury.
4. Military bridges. 1849. By G. W. Cullom.
*5. Resistance of piles. By Mason.
6. Casemate embrasures. 1857. By J. G. Totten.
7. Stability of arches. 1858. By D. P. Woodbury.
8. Siege of Fort Pulaski. 1862. By Q. A. Gillmore.
9. Limes, hydraulic cements and mortars. 4th ed. By Q. A. Gillmore. *New York*, 1872.
*10. Longitude by lunar culminations. By Bartlett.
*11. Determination of latitude with zenith and altitude telescope. By T. J. Lee.
12. Tables and formulæ. 1873. By T. J. Lee.
13. Physics and hydraulics of the Mississippi river. 1861. By A. A. Humphreys and H. L. Abbot.
*14. Siege artillery in the campaign against Richmond. By H. L. Abbot.
15. Use of the barometer. 1868. By R. S. Williamson.
16. Engineer and artillery operations against the defenses of Charleston harbor. 1863. By Q. A. Gillmore.
17. Materials for defensive armor. 1870. By W. R. King.
18. Geological exploration of the 40th parallel. 1870. By Clarence King.
19. Béton aggloméré. 1871. By Q. A. Gillmore.
*20. Defences of Washington. By J. G. Barnard.
21. Fabrication of iron for defensive purposes. 1872. By J. G. Barnard.
22. North Sea canal of Holland. 1872. By J. G. Barnard.

UNITED STATES. Department of war. Bureau of engineers. Preliminary report on Nebraska and Dakota in 1855-1857. By G. K. Warren. 8°. *Washington*, 1875.

UNITED STATES. Department of war. Bureau of engineers. Preliminary report upon a reconnaissance through southern and southwestern Nevada, in 1869. By George M. Wheeler, assisted by D. W. Lockwood, under the orders of E. O. C. Ord. 4°. *Washington*, 1875.

——— ——— ——— Report of explorations across the Great Basin of the territory of Utah, for a direct wagon-route from Camp Floyd to Genoa, in Carson valley, 1859; by J. H. Simpson; made by authority of the secretary, and under instructions from A. S. Johnston, commanding the department of Utah. 4°. *Washington*, 1876.

——— ——— ——— Report of geological exploration of the 40th parallel; Clarence King, geologist in charge. v. 2. Descriptive geology, by A. Hague and S. F. Emmons, 1877. 3. Mining industry, by J. D. Hague, 1870. 4. Palæontology, by F. B. Meek, James Hall, and R. P. Whitfield; ornithology, by Robert Ridgway, 1877. 5. Botany, by S. Watson, 1871. 6. Microscopical petrography, by Zirkel, 1876. *Illus.* 4°. *Washington*, 1870-77.

——— ——— ——— Report of the exploring expedition from Santa Fé, New Mexico, to the junction of the Grand and Green rivers, of the great Colorado of the West, in 1859; under command of J. N. Macomb, with geological report, by J. S. Newberry. 4°. *Washington*, 1876.

——— ——— ——— Report on the removal of Blossom rock, San Francisco harbor; by R. S. Williamson and W. H. Heuer. 4°. *Washington*, 1870.

——— ——— ——— Report upon geological and geographical surveys and explorations west of the 100th meridian; in charge of George M. Wheeler; under direction of A. A. Humphreys. 6 v. v. 3. Geology. 4. Paleontology. 5. Zoology. [v. 4 is called: Report upon United States geographical surveys, etc.] 4°. *Washington*, 1875-77.

——— ——— Bureau of ordnance. Annual report of the chief of ordnance to the secretary. 1872, '73, '75-77. 5 v. 8°. *Washington*, 1873-77.

——— ——— ——— Appendix F to the report of the chief of ordnance. Report on the mechanical properties of steel, chiefly with reference to gun construction on the Woodbridge system. By W. E. Woodbridge. 8°. *Washington*, 1875.

Digitized by Google

UNITED STATES. Department of war. Bureau of ordnance. Manual for the use of the officers of the United States army. 2d ed. 8°. *Washington*, 1850. 3d ed. 12°. *Philadelphia*, 1862.

——— ——— ——— Memoranda No. 14. Metallic cartridges, regulation and experimental, as manufactured and tested at the Frankford arsenal, Philadelphia; prepared under the direction of T. J. Treadwell. No. 17. Gatling guns. 18. Cavalry outfit. 19. Infantry outfit. 4°. *Washington*, 1873-75——.

——— ——— ——— Properties of metals for cannon, etc. By authority of the secretary of war *See* **Rodman**, T. J.

——— ——— ——— Reports of experiments on the properties of metals for cannon, and the qualities of cannon powder; with an account of the fabrication and trial of a 15-inch gun. By T. J. Rodman. By authority of the secretary. 4°. *Boston*, 1861.

——— ——— ——— Reports of experiments on the strength and other properties of metals for cannon; description of machines for testing metals; classification of cannon in service. 4°. *Philadelphia*, 1856.

——— ——— ——— Reports of experiments with small arms for the military service. 8°. *Washington*, 1856. Appendix, pp. 37.

——— ——— Description and rules for the management of the Springfield breech-loading rifle musket. Model, 1866. 8°. *Springfield*, 1867. [†]

——— ——— Letter from the secretary, transmitting Turnbull's report of the survey and construction of the Alexandria aqueduct, May 25, 1836. *n. t. p.*

——— ——— Military commission to Europe, 1855 and 1856. Report of Alfred Mordecai. 4°. *Washington*, 1860. Ex. doc. No. 60.

——— ——— ——— Report of the secretary, communicating the report of George B McClellan, one of the officers sent to the seat of war in Europe, 1855, 1856. 4°. *Washington*, 1857. Ex. doc. No. 1.

——— ——— ——— Report on the art of war in Europe in 1854-56; by Richard Delafield. 4°. *Washington*, 1860. Ex. doc. No. 59.

——— ——— Quartermaster-general's office. Annual report to the secretary, for the fiscal year ending June 30, 1877. *Washington*, 1877.

71 C P O

UNITED STATES. Department of war. Regulations for the uniform and dress of the army of the United States, as adopted by general orders, No. 31, June 12th, 1851. Also, for the navy and marine corps; and for the volunteer militia of each state. 1. 4°. *Boston*, 1857.

——— ——— Report of the expedition up the Yellowstone river, made in 1875, by James W. Forsyth and F. D. Grant, under orders of P. H. Sheridan. [With maps.] 8°. *Washington*, 1875.

——— ——— Report of the secretary, communicating, in compliance with a resolution of the senate of February 2, 1857, information respecting the purchase of camels for the purposes of military transportation. 8°. *Washington*, 1857.

——— ——— Report upon the reconnaissance of Northwestern Wyoming, including Yellowstone national park, made in the summer of 1873, by William A. Jones. With appendix. 8°. *Washington*, 1875.

——— ——— Signal office. Annual report of the chief signal officer to the secretary, for the fiscal year ending June 30, 1871. 8°. *Washington*, 1871.

——— ——— ——— Daily bulletin of weather reports; taken at 7.35 a. m., 4.35 p. m., and 11 p. m., Washington mean time, with the synopses, probabilities and facts. Sept., 1872—July, 1873. 11 v. 4°. *Washington*, 1873.

——— ——— ——— Practical use of meteorological reports and weather-maps. Circular. 8°. *Washington*, 1871.

——— ——— Surgeon-general's office. Catalogue of the library. 12°. Oct. 23d, 1865. pp. 31.

——— ——— ——— Catalogue of the library, with an alphabetical list of subjects. 4°. *Washington*, 1872.

——— ——— ——— Circulars. [4° and 8°. *Washington* and *Philadelphia*, 1863-77.]

CONTENTS.

No. 1. Report on epidemic cholera and yellow fever in the army of the United States during the year 1867. 4°. *Washington*, 1868.
2. Report on excisions of the head of the femur for gunshot injury. 4°. *Washington*, 1869.
3. Report of surgical cases treated in the army of the United States from 1865 to 1871. 4°. *Washington*, 1871.
4. Report on barracks and hospitals, with descriptions of military posts. 4°. *Washington*, 1870.
6. Reports on the extent and nature of materials available for the preparation of a medical and surgical history of the rebellion. 4°. *Philadelphia*, 1865.

Digitized by Google

UNITED STATES. Dept. of war—Continued.

8. Report on the hygiene of the United States army, with descriptions of military posts. 4°. *Washington*, 1875.

9. Report on the transport of sick and wounded by pack animals. By George A. Otis. 4°. *Washington*, 1877.

Sickness and mortality of the army during the first year of the war. 8°. [1863.] *n. t. p.*

——— ——— ——— Hospital of medical department at international exhibition of 1876. [Description of exhibits.] 8°. *Philadelphia* and *Washington*, 1876.

CONTENTS.

No. 2. Description of the models of hospital cars. By J. J. Woodward. pp. 10.

No. 3. Description of the models of hospitals. By J. J. Woodward. pp. 23.

No. 4. Description of the models of hospital steam vessels. By J. J. Woodward. pp. 12.

No. 5. Description of Perot and co.'s U. S. A. mess-chest and improved medicine-wagon. pp. 16.

No. 6. Description of the U. S. A. medical transport cart. By D. L. Huntington and George A. Otis. pp. 16.

No. 7. Description of selected specimens from the surgical section of the U. S. A. medical museum at Washington. By George A. Otis. pp. 22.

No. 8. Checklist of preparations and objects in the section of human anatomy of the U. S. A. medical museum. By George A. Otis.

No. 9. List of microscopical preparations from the U. S. A. medical museum. By J. J. Woodward.

No. 10. Description of selected specimens from the medical section of the U. S. A. medical museum By J. J. Woodward. pp. 21.

No. *. List of skeletons and crania in the section of comparative anatomy of the U. S. A. medical museum. pp. 52.

No. **. The medical staff of the U. S. A. and its scientific work. Address to the international medical congress. By J. J. Woodward. pp. 28.

No. ***. Typho-malarial fever: is it a special type of fever? Remarks introductory to the discussion of the question in the international medical congress. By J. J. Woodward. pp. 28.

——— ——— ——— The medical and surgical history of the war of the rebellion. (1861-65.) Prepared under the direction of Joseph K. Barnes. Part 1, v. 1. Medical history. 2. Surgical history. Part 2, v. 2. Surgical history. 4°. *Washington*, 1870-76.

——— ——— ——— Report to the surgeon-general, on an improved method of photographing histological preparations by sunlight. By J. J. Woodward. *Washington*, 1871.

——— ——— ——— Report to the surgeon-general, on the minute anatomy of two cases of cancer. By J. J. Woodward. *Washington*, 1872.

UNITED STATES. Dictionary of Americanisms. *See* **Bartlett**, J. R.

——— Dictionary of United States army officers. *See* **Gardner**, C. K.

——— Dispensatory of the. *See* **Wood**, G. B., and **Bache**, F.

——— Engineering in the. **Weale's papers on engineering, v. 2.**

——— Erwerbszweige, Fabrikwesen und Handel der Vereinigten Staaten. *See* **Fleischmann**, C. L.

——— Executive. Addresses and messages of the presidents *See* **Williams**, E.

——— ——— Message from the president, transmitting copies of letters, documents and communications, in relation to the delay of the sailing of the exploring expedition. April 28, 1836. 8°. [*Washington*, 1838.] Ex. doc. No. 147. *n. t. p.*

——— ——— Message from the president, transmitting a report of the secretary of state upon the subject of the tobacco trade between the United States and foreign countries. April 16, 1840. 8°. Ex. doc. No. 229. *n. t. p.*

——— ——— Message of the president, to the two houses of congress, at the 2d session of the 37th congress. 3 v. 8°. *Washington*, 1861. Ex. doc. No. 1.

——— Experiments on gunpowder, made at the Washington arsenal. *See* **Mordecai**, A.

——— Fish and fishing of the. *See* **Herbert**, H. W.

——— Fisher's manual for the. *See* **American angler's guide.**

——— Gazetteer of the. *See* **Baldwin**, T., and **Thomas**, J.

——— Gazetteer of the. *See* **Haskel**, D., and **Smith**, J. C.

——— Geological map of the. *See* **Marcou**, Jules.

——— Geological observations on the. *See* **Lyell**, *Sir* C. Travels in North America.

——— Historical account of American coinage. *See* **Hickcox**, John H.

——— History and topography of the. *See* **Hinton**, J. H.

——— History of. *See* **Fergus**, Henry. **Lardner's cabinet cyclopædia, v. 31, 32.**

——— History of immigration to the. *See* **Bromwell**, W. J.

——— History of the iron trade of the. *See* **French**, B. F.

Digitized by Google

UNITED STATES, History of the railroads and canals of the. *See* **Poor**, H. V.

—— Horse and horsemanship of. *See* **Herbert**, H. W.

—— Industry of the. *See* **Whitworth**, J., and **Wallis**, G.

—— Die innern Communicationen der Vereinigten Staaten. *See* **Gerstner**, F. A. v.

—— Law register. *See* **Livingston**, J.

—— letter writer; or, directions for composing correctly letters, deeds, documents, etc.; with an introduction on orthography and punctuation. 12°. *Philadelphia*, 1855.

—— Manual of public libraries, etc., in. *See* **Rhees**, W. J.

—— Marine boilers of the. *See* **Bartol**, B. H.

—— Mémoire sur les bateaux à vapeur des États-Unis. *See* **Marestier**, J. B.

—— Metallic wealth of the, described and compared with that of other countries. *See* **Whitney**, J. D.

—— Metallurgy in. Das Eisenhüttenwesen der Vereinigten Staaten von Nord-Amerika. *See* **Tunner**, P. von.

—— Mitchell's reference and distance map of, Accompaniment to. *See* **Mitchell**, S. A.

—— National academy of s iences. *See* **National** academy.

—— (The) nautical magazine and naval journal. v. 1–6. [v. 1 and 2 are entitled 'The nautical magazine and quarterly review'.] 1854–57. 8°. *New York*, 1854–57.

—— Naval and mail steamers of the. *See* **Stuart**, C. B.

—— Naval dry docks of the. *See* **Stuart**, C. B.

—— Naval percussion locks and prime s of the. *See* **Dahlgren**, J. A.

—— The navy of the. *See* **Dickerson**, E. N.

—— patent association. Publications. v. 2. A defence of the United States patent system; by John S. Perry, Albany. Our country's debt to patents; by H. Howson, Philadelph a. 8°. *Boston*, 1875.

—— patents. *See* **Patent** cases, **Patent** law, **Patents** and other privileges, *and* **Patents** for inventions.

—— The pharmacopœia of the. *See* **Pharmacopœia**.

UNITED STATES, Physical geography of the. By C. Ellet. **Smiths'n contrib., v. 2.**

—— Power and p ogress of the. *See* **Pousain**, G. T.

—— Progress of the. *See* **Fisher**, R. S.

—— Public economy of the. *See* **Colton**, C.

—— La puissance américaine. *See* **Pousain**, G. T.

—— register; or blue book for 1865–1870, 1875–1877; containing a list of all the principal officers of the federal government, etc. Compiled by J. Disturnell. [1876–77 are entitled 'American register'.] 8°. *New York*, 1865–77. [†]

—— Reiseskizzen aus den Vereinigten Staaten. *See* **Macoo**, Heinrich, **and Jasper**, O.

—— The republic of the United States; its duties and relations. *See* **Republic**.

—— sanitary commission. Bulletin, 1863–65. 3 v. Nos. 1–40. New York, Nov. 1, 1863, to Aug. 1, 1865. Washington and Philadelphia. 8°. *New York*, 1866.

—— —— —— Documents. v. 1, Nos. 1–60; v. 2, Nos. 61–95. 8°. *New York*, 1866.

—— Second visit to the. *See* **Lyell**, *Sir* C.

—— service magazine. v. 1–5. 8°. *New York*, 1864–66.

—— The state of the union: being a complete documentary history of the public affairs of the United States, foreign and domestic, for the year 1854. *See* **State** of the union. [†]

—— Statistical view of the. 1850. *See* **De Bow**, J. D. B.

—— Statistical view of the commerce of the. *See* **Pitkin**, T.

—— Statistical views of the. *See* **Watterston**, G., and **Van Zandt**, N. B.

—— Statistics of the. *See* **Tanner**, H. S. Accompaniment to Universal atlas.

—— Steamboats of. By J. Renwick. *See* **Tredgold**, T. **Steam engine, series 1.**

—— Steam navigation in the. **Weale's papers on engineering, v. 3.**

—— sugar cane in the, Manual on the cultivation of *See* **Silliman**, B.

—— Valley of the Great Salt Lake. Survey. *See* **Stansbury**, H.

—— Voies de communication aux États-Unis. *See* **Chevalier**, M.

Unity of purpose, or rational analysis. *See* **Young**, Augustus.

Universal catalogue of books on art, etc. *See* **Pollen**, J. H.

Digitized by Google

Universal magazine of knowledge and pleasure, containing news, letters, trade, etc., and arts and sciences, which may render it entertaining and instructive. v. 1–111, 1747–1802. 8°. *London*, 1747–1802.

UNIVERSE, Physical description of the. *See* **Humboldt**, F. H. A. von.

——— Utrius cosmi historia. *See* **Fludd**, Robertus.

UNIVERSITIES. Universitäten; von Wilhelm Hartel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

University series. 12°. *New Haven, Conn.*, 1870–71.

CONTENTS.

No. 1. On the physical basis of life. By T. H. Huxley.

No. 2. The correlation of vital and physical forces. By G. F. Barker.

No. 3. As regards protoplasm, in relation to Huxley's essay on the physical basis of life. By James H. Stirling.

No. 4. On the hypothesis of evolution, physical and metaphysical. By Edward D. Cope.

No. 5. Scientific addresses. 1) The methods and tendencies of physical investigation. 2) On haze and dust. 3) On the scientific use of the imagination. By John Tyndall.

No. 6. The action of natural selection on man. 1) The development of human races under the law of selection. 2) The limits of natural selection as applied to man. By Alfred Russel Wallace.

Unterricht über die Obstbaumzucht, für die Landleute. 12°. *Wien*, 1810.

Upham, Charles Wentworth. Life, explorations and public services of John Charles Fremont. 46th thousand. *Illus.* 12°. *Boston*, 1856.

Upham, Thomas C. Mental philosophy; embracing the three departments of the intellect, sensibilities and will. 2 v. 12°. *New York*, 1869.

UPHOLSTERY. Abridgments English Patents, No. 39.

——— *See* PHILADELPHIA. **Internat. exhib. 1876, Group 7.**

——— Decorative. Tapezier-Arbeiten und Decoration. Von Ant. Fix. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— Manuel du tapissier. *See* **Garnier-Audiger. 100 Manuels Roret.**

——— Upholsterer's companion. *See* **Stokes**, J.

——— Upholsterer's guide. *See* **Arrowsmith**, J.

Upjohn, Richard. Rural architecture, designs, working drawings, and specifications for a wooden church, and other rural structures. fol. *New York*, 1852.

UPSALA (Sweden). Årsskrift utgiven af kongl. vetenskaps-societeten i Upsala. Första-andra årgangen. 8°. *Upsala*, 1860–61.

——— Nova acta Regiæ societatis scientiarum Upsaliensis. Seriei tertiae, v. 1–8, 1856–73. 4°. *Upsaliae*, 1856–73——.

——— observatory. Bulletin météorologique mensuel de l'observatoire de l'université d'Upsal; rédigé par Hildebrand Hildebrandsson. T. 1–7, 1870–75. 4°. *Upsal*, 1870–75.

Upton, Francis H. A treatise on the laws of trade marks, with a digest and review of the English and American authorities. 8°. *Albany*, 1860.

Upton, Rebecca A. The housekeeper and gardener. 12°. *Boston*, 1858.

Urbin, Edward. Practical guide for puddling iron and steel; to which is added, a comparison of the resisting properties of iron and steel, by A. Brüll. Transl. from the French, by A. A. Fesquet. 8°. *Philadelphia*, 1868.

Urbino, *Madame* L. B., **Day**, Henry, and others. Art recreations; guide to pencil drawing, oil painting, etc., with valuable receipts for preparing materials. *Illus.* 12°. *Boston*, 1860. Later ed., 1869.

Ure, Andrew. The cotton manufacture of Great Britain, investigated, with an introductory view of its comparative state in foreign countries. To which is added a supplement, completing the statistical and manufacturing information to the present time, by P. L. Simmonds. *Illus.* 2 v. 8°. *London*, 1836. Later ed., 1861.

——— A dictionary of arts, manufactures and mines. 8°. *London*, 1839. Also, American ed. 2 v. *New York*, 1851. 3d ed. 3 v. *Boston*, 1853. 5th ed. Edited by Robert Hunt. 3 v. *London*, 1860. 6th ed. 3 v. 1867. American ed. 2 v., with supplement. *New York*, 1873.

——— The philosophy of manufactures: or an exposition of the scientific, moral and commercial economy of the factory system of Great Britain. Continued to its present time, by P. L. Simmonds. 3d ed. 8°. *London*, 1861.

Digitized by Google

Ure, Andrew. Praktisches Handbuch des Baumwollen-Manufacturwesens. Nach der 'Cotton manufacture of Great Britain' von. Deutsch bearbeitet von Carl Hartmann. *Illus.* 2te Ausgabe. 8°. *Weimar,* 1843. **93 Neuer Schauplatz der Künste.**

——— Recent improvements in arts, manufactures and mines; being a supplement to his dictionary. *Illus.* 8°. *New York,* 1839. Later eds., 1849-63.

URICONIUM, The Roman city of. *See* **Anderson,** J. Corbet.

URINALS. Abridgments English Patents, No. 63.

——— Fosses d'aisances, latrines, urinoirs, etc. *See* **Liger,** F.

URINARY bladder, prostate gland, and urethra. *See* **Gross,** S. D.

——— organs, Diseases of. *See* **Morland,** W. Wallace.

Urling, R. W. The laws of patents in foreign countries; transl. by. 8°. *London,* 1845.

URN-burial. Hydriotaphia; together with the garden of Cyrus. *See* **Brown,** Thomas.

USEFUL arts. *See* **Bigelow,** Jacob.

Usher, W. Types of mankind; contributions by. *See* **Nott,** J. C., and **Gliddon,** George R.

UTAH, Explorations across the Great Basin of. *See* **Simpson,** J. H.

——— Meteorological observations in Utah, etc. *See* **Gannett,** Henry. [†] *Add.*

——— Survey of the valley of the Great Salt Lake. *See* **Stansbury,** H. Ex. doc. No. 3.

UTERINE diseases and displacements. *See* **Trall,** R. T.

UTERUS, Diseases of the neck of the. *See* **Meigs,** Charles D.

UTICA and Syracuse R. R., Description of timber bridges on. By B. F. Isherwood. **Weale's theory of bridges, v. 2.**

UTRECHT. Genootschap voor landbouw en kruidkunde. Berigten en mededeelingen. 1ste deel, 1843-48. 4°. *Utrecht,* 1843-48.

——— Meteorologische waarnemingen in Nederland en zijne bezittingen en afwijkingen van temperatuur en barometerstand op vele plaatsen in Europa. Uitgegeven door het Koninklijk Nederlandsch meteorologisch instituut, 1862-73. [1870, 1871, part ii, 1872, part ii, 1873, wanting.] 18 deelen. 1. 8°. *Utrecht,* 1863-75.

Vacani di Forteolivo, Camillo. Della laguna di Venezia e dei fiumi nelle attigue provincie. Memoria del. 8°. *Firenze,* 1867.

VACCINATION, A popular essay on. *See* **Popular.**

VACUUM. Verdunsten oder Verdampfen, etc. *See* **Leuchs,** Johann Carl.

Vaiden, Thomas Jefferson. The medical companion: presenting new and original views of domestic practice, being a practical and conservative system of medicine for individuals and families. roy. 8°. *New York,* 1846.

Vail, Alfred. The American electro-magnetic telegraph: with the reports of congress, and a description of all telegraphs known, employing electricity or galvanism. *Illus.* 8°. *Philadelphia,* 1845. [†]

Vala. A mythological tale. *See* **Godwin,** Parke.

Valcourt, L. P. de. Mémoires sur l'agriculture, les instrumens aratoires et d'économie rurale; avec atlas. 8°. pl. obl. 4°. *Paris,* 1841.

Valentine, J. S. Details of the bridge over the Ouse. *See* **Haskoll,** W. D. Assistant engineer's railway guide.

Valentine, *Mrs.* R. The home book of pleasure and instruction; ed. by. Contributors, Mrs. Aylmer, Edward Dalziel, Miss Dyson, Mrs. English and others. *Illus.* 8°. *London and New York,* 1868.

Valentine, W. J. Munitions of war. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 5.**

Valérius, B. Traité théorique et pratique de la fabrication du fer avec un exposé des améliorations dont elle est susceptible, principalement en Belgique. 8°. *Paris,* 1843.

Valicourt, E. de. Nouveau manuel complet de photographie sur métal, sur papier et sur verre, contenant toutes les découvertes de MM. Niepce et Daguerre, T. Talbot, Herschel, Hunt, Blanquart-Evrard, Niepce de St. Victor, Fizeau, Claudet, baron Gros, Humbert de Molard, Legray, etc. Ainsi que les perfectionnements qui y ont été apportés; précédé d'un résumé historique et critique sur l'origine et les progrès de la photographie. Nouvelle éd. mise au courant des perfectionnements les plus récents. *Illus.* 12°. *Paris,* 1851. **125* Manuels Roret.**

Digitized by Google

Vallée, L. L. Le tracé des chemins de fer de Paris en Belgique et en Angleterre, et d'Angleterre en Belgique, présenté par. *See* FRANCE. **Ministère** de travaux publics.

Vallet, Lucien. Principes de la construction des turbines d'après une nouvelle méthode pour la détermination rationelle de la forme des aubes: suivis de la théorie et des principes de la construction des pompes centrifuges. Avec atlas. 8°. *Paris,* 1875.

——— Propulseur à pression atmosphérique, applicable à la navigation à vapeur, maritime ou fluviale. 8°. *Paris,* 1875.

Vallet d'Artois. Handbuch der Handschuhfabrikatiou; Anhang alle Flecken zu verhüten. *See* **Vollständiges. 84 Neuer Schauplatz der Künste.**

——— Manuel du fabricant de gants, considéré dans ses rapports avec la mégisserie, la chamoiserie et les diverses opérations de teinture qui s'y rattachent. 2e éd. 18°. *Paris,* 1835. **74 Manuels Roret.**

Value, V. System of French pronunciation. 18°. *Philadelphia,* 1846. pp. 12.

VALVE-gearing, Designing. *See* **Welch,** Edward J. Cowling.

——— gears, Treatise on. *See* **Zeuner,** Gustav.

VALVES, Safety. *See* **Buell,** R. H. **Van Nostrand's science series, No. 21.**

Van Armringe, William Frederick. An investigation of the theories of the natural history of man, and an outline of a new natural history of man, founded upon history, anatomy, physiology, and human analogies. 8°. *New York,* 1848.

Van Beneden, P. J. Animal parasites and messmates. 12°. *New York,* 1876. **International scientific series, No. 19.**

Van Buren, Martin, Life and political opinions of. *See* **Holland,** W. M.

VANCOUVER island and British Columbia, The naturalist in. *See* **Lord,** John Keast.

Vandael, —. Manuel théorique et pratique du tailleur. 18°. *Paris,* 1833. **86 Manuels Roret.**

Vandenburgh, A. The volley gun: observations on a new system of artillery. 8°. *London,* 1864. pp. 36.

Van den Corput, Éd. De la fabrication du papier au point de vue de la technologie chimique, et des perfectionnements successifs apportés à cette industrie. 12°. *Paris,* 1862.

Van den Corput, Éd.—Continued.

Vander Heiden, Jan, and Jan, *de jonge.* *See* **Heiden,** Jan vander, and Jan vander, *de jonge.*

Vander Maelen, Ph. Dictionnaire, géographique. Le docteur Meisser chargé de la rédaction et la correspondance. 8 v. 8°. *Bruxelles,* 1831–38.

CONTENTS.

De la province de Liége. 1831.
De la province de Namur. 1832.
De la province de Hainault. 1833.
De la province de Flandre Orientale. 1834.
De la province d'Anvers. 1834.
De la province du Limbourg 1835.
De la province du Luxembourg. 1838.
De la province de Flandre Occidentale. 1836.

Vandervell, H. E., and **Witham,** T. Maxwell. A system of figure skating: the theory and practice of the art as developed in England, with a glance at its origin and history. 12°. *London,* 1869.

VAN DIEMEN'S LAND, Royal society of. *See* HOBART TOWN.

Vanes, Benjamin. A treatise on the British nail trade, in which the transactions of the workmen and masters, as amongst themselves with regard to weights and lengths of nails, allowance in tale, by custom established, waste of iron, &c., are thoroughly considered. Also tables shewing what iron is suitable for all sizes and description of nails. 4°. *London,* 1841.

Van Helmont, John Baptista. Oriatrike or physick refined. The common errors therein refuted, and the whole art reformed and rectified: being a new rise and progress of phylosophy and medicine, for the destruction of diseases and prolongation of life: written by that most learned, famous, profound and acute phylosopher and chymical physitian, John Baptista Van Helmont, toparch or governor in Morede, Royenborch, Oorschot, etc.: and now faithfully rendered into English, in tendency to a common good, and the increase of true science, by J. C., sometime of M. H. Oxon. sm. fol. *London,* 1662.

VANITY of the arts and sciences. *See* **Agrippa,** Henry Cornelius.

Van Lennep, Henry J. Travels in little known parts of Asia Minor; with illus-

Digitized by Google

Van Lennep, Henry J.—Continued.
trations of Biblical literature, and researches in archæology. 2 v. 12°. *New York,* 1870.

Van Lynden van Hemmen, F. G. *See* **Lynden van Hemmen,** F. G.

Van Nostrand's eclectic engineering magazine. v. 1–16. 8°. *New York,* 1869–77——.

Van Nostrand's science series. *Illus.* No. 1–33. 33 v. 18°. *New York,* 1873–78——.

CONTENTS.

No. 1. Chimneys for furnances, fireplaces and steam boilers. By R. Armstrong. 1873.
2. Steam boiler explosions. By Zerah Colburn. 1873.
3. Practical designing of retaining walls. By Arthur Jacob. 1863.
4. Proportions of pins used in bridges. By Charles Bender. 1873.
5. Ventilation of buildings. By W. F. Butler. 187–.
6. On the designing and construction of storage reservoirs. By Arthur Jacob. 1873.
7. Surcharged and different forms of retaining walls. By James S. Tate. 1873.
8. A treatise on the compound engine. By John Turnbull, jr. 1874.
9. Fuel. By C. William Siemens. To which is appended the 'Value of artificial fuels as compared with coal'. By John Wormald. 1874.
10. Compound engines. Transl. from the French of A. Mallet. 1874.
11. Theory of arches. By W. Allen. 1875.
12. A theory of voussoir arches. By W. E. Cain. 1874.
13. Gases met with in coal mines. By J. J. Atkinson. 1875.
14. Friction of air in mines. By J. J. Atkinson. 1875.
15. Skew arches. By E. W. Hyde. 1875.
16. A graphic method for solving certain algebraical equations. By George L. Vose. 1875.
17. Water and water supply. By W. H. Corfield. 1875.
18. Sewerage and sewage utilization. By W. H. Corfield. 1875.
19. Strength of beams under transverse loads. By W. Allen. 1875.
20 Bridge and tunnel centres. By John B. McMasters. 18°. 1875.
21. Safety valves. By Richard H. Buel. 1876.
22. High masonry dams. By John B. McMasters. 1876.
23. The fatigue of metals under repeated strains. By Ludwig Spangenberg. 1876.
24. A practical treatise on the teeth of wheels. By S W. Robinson. 1876.
25. Theory and calculations of continuous bridges. By Mansfield Merriman. 1876.
26. Practical treatise on the properties of continuous bridges. By Charles Bender. 1876.

Van Nostrand's science series—Continued
No. 27. On boiler incrustation and corrosion. By F. J. Rowan. 1876.
28. On transmission of power by wire rope. By Albert W. Stahl. 1876.
29. Injectors; their theory and use. Transl. from the French of M. Leon Pouchet. 1877.
30. Terrestrial magnetism and the magnetism of iron ships. By Fairman Rogers. 1877.
31. The sanitary condition of dwelling houses in town and country. By George E. Waring, jr. 1877.
32. Cable making for suspension bridges. By Wilhelm Hildebrand. 1877.
33. Mechanics of ventilation. By George W. Rafter. 1878.

Van Sloetten, Henry Cornelius. The Isle of Pines, or a late discovery of a fourth island near Terra Australis, Incognita. 16°. *London,* 1668.

Van Zandt, Nicholas Biddle. Tabular statistical views of the United States. *See* **Watterston,** G.

Vapereau, Louis Gustave. Dictionnaire universel des contemporains. Ouvrage rédigé et continuellement tenu à jour avec le concours d'écrivains et de savants de tous les pays. T. 1-2. 8°. *Paris,* 1858–59.

VAPOR-bath, Properties and medical application of. *See* **Gibney,** J.

—— Experimental inquiries respecting heat and vapor. *See* **Johnson,** W. R.

VAPORIZATION, Howard's method of, *See* **Tredgold,** T. **Steam engine, 1st series.**

VARIATION of animals and plants under domestication. *See* **Darwin,** Charles.

VARIETY-trade; bronze and leather smallwares. Kurzwaaren. Bronze- und Ledergallanterie. Taschnerwaaren. Von J. Weidmann. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 10.**

—— Children's toys. Kurzwaaren. Kinderspielwaaren. Von Carl Th. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 10.**

—— Meerschaum and tortoise shell smallwares. Kurzwaaren aus Meerschaum und Schildplatt, etc. Von Ludwig Hartmann. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 10.**

Varley, D. Rudimentary treatise on mineralogy. *Illus.* 12°. *London,* 1849. **Weale's series, No. 45.**

Digitized by Google

VARNISH. Praktische Erfahrungen über die gesammte Firnissfabrikation, etc. *See* **Freudenvoll,** D. and F.

VARNISHING. Manuel du vernisseur. *See* **Vergnaud,** A. D. **56 Manuels Roret.**

—— The painter, gilder and varnisher's companion. *See* **Painter.**

VARNISHES. Abridgments English Patents, Nos. 50 and 67.

VATICAN museum, Selection from the. *See* **Wightwick,** G.

Vattemare, Alexandre. Collection de monnaies et médailles de l'Amérique du Nord, de 1652 à 1858. Offerte à la Bibliothéque impériale par. Catalogue avec notices historiques et biographiques. 12°. *Paris,* 1861.

—— International exchanges. Letter to Hannibal Hamlin, accompanied by a description of the metrical decimal system, by William W. Mann; and reports by Silbermann and Durand on the standard weights, measures, and coins, exchanged between the governments of France and the United States. 8°. *Paris,* 1853.

Vaughn, William M., and **Glenn,** William W. Stair building simplified, with improvements in framing hip-roofs. *Illus.* sm. 4°. *Meadville, Pa.,* 1857.

Vega, Georgs von. Sammlung mathematischer Tafeln, von grösseren logarithmisch-trigonometrischen Tafeln. *Leipzig,* 1849.

VEGETABLE anatomy and physiology. Der Baum. Studien über Bau und Leben der höheren Gewächse. *See* **Schacht,** H.

—— diet. *See* **Alcott,** William A.

—— kingdom. *See, also,* **Botany, Natural history,** etc.

—— —— The, or the structure, classification and uses of plants. *See* **Lindley,** John.

—— practice, American. *See* **Mattson,** Morris.

—— products. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 4.**

—— world. Régénération de la nature végétale. *See* **Rauch,** F. A.

VEGETABLES, and how to grow them *See* **Watts,** Elizabeth.

—— How to cook. By G. Hill. **Household manuals, v. 9.**

—— of America, The field and garden. *See* **Burr,** Fearing, *jr.*

VEGETABLES. Vegetable substances used in arts and manufactures. By E. Solly. *See* **Lectures** on the results of the exhibition.

VEGETATION. Die Vegetationsverhältnisse von Croatien. *See* **Neilreich,** August.

Vegetius, Flavius. Flavii Vegetii de re militari libri qvatvor. Post omnes omnium editiones, ope veterum librorum correcti, a Godescalco Stewechio. 12°. *Lvgdvni Batavorvm,* 1592.

Vegetius, Publius. Mulomedicina. Opera Joan. Sambuci Pannonii. 12°. *Basileæ,* 1574.

VEHICLES and accessories. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 17.**

VEINS and lymphatics. *See* **Neill,** John.

Veit, Raimund. Handbuch der Landgüter-Verwaltung. 3 Bde. 12°. *Augsburg,* 1838.

Veith, Heinrich. Deutsches Bergwörterbuch, mit Belegen. roy. 8°. *Breslau,* 1871.

Veitmeyer, L. A. Vorarbeiten zu einer zukünftigen Wasser-Versorgung der Stadt Berlin. Mit Atlas. roy. 8° and folio. *Berlin,* 1871.

Velasquez de la Cadena, Mariano. Dictionary of the Spanish and English languages; with additions by. *See* **Neuman,** H.

Velocipede (The). Its history, varieties, and practice. *Illus.* 18°. *New York,* 1869.

—— (The). Its past, present and future. *See* **B.,** J. F.

Velpeau, Alf. A. L. M. New elements of operative surgery. Transl. by P. S. Townsend. Ed. by Valentine Mott. 3 v. With atlas of plates. 8° and 4°. *Philadelphia,* 1847.

—— Nouveaux éléments de médecine opératoire; avec un traité de bandages de petite chirurgie. 2e éd. T. 1–4. *Illus.* 8°. *Paris,* 1839.

VENANGO oil regions, History of. *See* **Harris,** Charles H.

VENEREAL diseases. *See* **Jahr,** G. H. G.

—— —— Atlas of. *See* **Cullerier,** M. A.

—— —— The nature and treatment of. *See* **Bostwick,** Homer.

VENICE. Collezione degli atti delle solenni distribuzioni de' premj d'industria fatte in Venezia. *See* MILAN.

Digitized by Google

VENICE. Della laguna di Venezia. *See* **Vacani di Forteolivo**, Camillo.

——— Stellung Venedigs in der Weltgeschichte. *See* **Thomas**, G. M.

VENTILATION. Abridgments English Patents, Nos. 52 and 71.

——— and warming of buildings. *See* **Ruttan**, H.

——— Apparatus. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 14.**

——— Bau der Krankenhäuser mit Berücksichtigung der Ventilation und Heizung. *See* **Degen**, Ludwig.

——— Erfindungen über Ventilations-Anlagen. *See* **Péclet**, Jean C. E. **212 Neuer Schauplatz der Künste.**

——— Études sur la ventilation. *See* **Morin**, Arthur.

——— Extracting foul air out of ships. *See* **Sutton**, S.

——— Handbuch für Einrichtungen der Ventilation und Heizung von öffentlichen und Privatgebäuden. *See* **Degen**, Ludwig.

——— Heizung, Ventilation und Wasserleitungen. Von Leopold Strohmayer. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 17.**

——— History and art of warming and ventilating rooms and buildings. *See* **Bernan**, Walter.

——— in American dwellings. *See* **Reid**, David Boswell.

——— Lectures on. *See* **Leeds**, Lewis W.

——— Means of obtaining healthful warmth and. *See* **Arnott**, Neil.

——— Mechanics of. *See* **Rafter**, George W. **Van Nostrand's science series, No. 33.**

——— Mode of ventilating stables. *See* **Harley**, William.

——— New system of. *See* **Gouge**, Henry A.

——— Nouveaux documents relatifs au chauffage et à la ventilation des établissements publics. *See* **Péclet**, Jean C. E.

——— Observations on the ventilation of rooms. *See* **Whitehurst**, J.

——— of buildings. *See* **Butler**, W. F. **Van Nostrand's science series, No. 5.**

——— of dwelling houses. *See* **Edwards**, Frederick, *jr.*

——— of dwelling houses and schools. *See* **Miles**, Henry H.

——— of mines. **Abridgments English Patents, No. 71.**

VENTILATION of mines. Ventilation des mines. *See* **Devillez**, A.

——— of mines. Die Ventilationsmaschinen der Bergwerke. *See* **Hauer**, Julius von.

——— of public sewers. *See* **Rowell**, G. A.

——— Practical. *See* **Burn**, Robert S.

——— Practical observations on ventilating and warming public edifices. *See* **Practical.**

——— Principien der Ventilation und Luftheizung. *See* **Wolpert**, A.

——— Principles of warming and ventilating. *See* **Tredgold**, T.

——— Statistics and remarks on. *See* **Dunn**, Matthias. Winning and working of collieries.

——— Suggestions on. *See* **Shedd**, J. H., *and* **Edson.**

——— Theory and practice of. *See* **Reid**, D. B.

——— Treatise on. *See* **Hood**, Charles.

——— Treatise on. *See* **Perkins**, E. E.

——— Treatise on. *See* **Ritchie**, R.

——— Treatise on. *See* **Wyman**, M.

——— Treatise on the ventilation of coal mines. *See* **Scott**, R.

——— Treatise on the warming and ventilation of buildings. *See* **Richardson**, Charles J.

——— Treatise on warming and ventilation *See* **Tomlinson**, C. **Weale's series, Nos. 57, 58.**

——— Warming and ventilating. *See* **Arnott**, Neil.

——— Zur Frage der Ventilation. *See* **Lunge**, Georg.

VENTILATORS. Centrifugal-Ventilatoren. *See* **Rittinger**, P.

——— A description of. *See* **Hales**, Stephen.

——— Theorie und Bau der Ventilatoren. *See* **Redtenbacher**, F.

Venturoli, Giuseppe. Elements of the theory of mechanics, to which is added a selection of problems in mechanics. Transl. from the Italian, by D. Cresswell. *Illus.* 8°. *Cambridge*, 1822.

VENUS, A lecture on the transit of. By William Huggins. **Science lectures for the people, series 6.**

Vérardé, M. [*pseud.*] *See* **Boitard**, P.

Verdam, G. J. Grundsätze der angewandten Werkzeugswissenschaft und Mechanik. Aus dem Holländischen übersetzt von C. H. Schmidt. *Illus.* 4 Bde. 8°. *Ilmenau*, 1834-35. **66-68 Neuer**

Digitized by Google

Verdam, G. J.—Continued.

Schauplatz der Künste. [B. 4 is 'Grundsätze der Dampfmaschinen'.]

—— Die Grundsätze nach welchen alle Arten von Dampfmaschinen zu beurtheilen und zu erbauen sind. Aus dem Holländischen von C. H. Schmidt. *Illus.* 4. Abth. 8°. *Weimar*, 1837–48. **69–71, 100 Neuer Schauplatz der Künste.**

Verdeil, F. De l'industrie moderne. 8°. *Paris*, 1861.

Verdier. Nouveau manuel complet de marine. 1e–2e partie. 18°. *Paris*, 1837. **113 Manuels Roret.**

Vergnaud, A. D. Manuel d'équitation. *Illus.* 18°. *Paris*, 1834. **14 Manuels Roret.**

—— Manuel de chimie amusante; trad. par. *See* **Accum,** F., and others. **6 Manuels Roret.**

—— Manuel de chimie; suivi d'un dictionnaire de chimie. 4e éd. 18°. *Paris*, 1834. **4 Manuels Roret.**

—— Manuel de l'artificier. *Illus.* 2e éd. 18°. *Paris*, 1828. **29 Manuels Roret.**

—— Manuel de perspective, du dessinateur et du peintre. *Illus.* 4e éd. 18°. *Paris*, 1835. **20 Manuels Roret.**

—— Manuel du brasseur; revue par. *See* **Accum,** F. **105 Manuels Roret.**

—— Manuel du dessinateur; revue par. *See* **Perrot,** A. M. **24 Manuels Roret.**

—— Manuel du fondeur; refond. par. *See* **Launay,** J. B. **39 Manuels Roret.**

—— Manuel du peintre en bâtimens, du fabricant de couleurs, du vitrier, du doreur du vernisseur et de l'argenteur. 7e éd. 18°. *Paris*, 1836. **56 Manuels Roret.**

—— Manuel du teinturier; ref. par. *See* **Riffault.** **71 Manuels Roret.**

—— Manuel du travail des métaux; trad. par. *See* **Lardner,** D. **46 Manuels Roret.**

Vergnaud, P. Manuel d'optique; trad. par. *See* **Brewster,** *Sir* D. **19 Manuels Roret.**

VERMICELLI-maker. Art du vermicellier. Par P. J. Malouin. PARIS. **Acad. des sc.; arts et métiers, v. 41, also v. 1.**

Vermischte Schriften. [Collection of technical treatises bound in 1 v.]

Vermischte Schriften—Continued.

CONTENTS.

1. Lehre von den mineralischen Düngmitteln. Von K. R. Hermann. 18°. *Colberg*, 1845.
2. Anweisung die Kartoffeln zu verbessern. Von C. F. Plack. 18°. *Breslau*, 1845.
3. Der Mist, seine chemische Zusammensetzung, seine Wirkung als Düngemittel und seine Zubereitungsweise. 18°. *Braunschweig*, 1846.
4. Die neunte Versammlung deutscher Land- und Forstwirthe in Breslau. 18°. 1845.

VERMONT. History of New England. *See* **Coolidge,** Austin J., and **Mansfield,** J. B.

—— University of, Alphabetical and analytical catalogue of the library. 8°. *Burlington*, 1854.

Vermuyden, Cornelius, A life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 1.**

Versammlung deutscher Land- und Forstwirthe. Berichte über die Ausstellung der Wollvliesze, Wollproben, Wollfabrikate, etc.; während der sechsten Versammlung. Berichte, 6–10. 8°. *Rostock.*

—— deutscher Naturforscher und Aerzte. Amtlicher Bericht über die dreiunddreissigste Versammlung, zu Bonn im September 1857, hrsg. von den Geschäftsführern derselben, J. Noegerath und H. F. Kilian. *Illus.* 4°. *Bonn*, 1859.

Versorgung (Die zur) der Städte und anderer bewohnter Orte mit fliessendem Wasser angewendeten Maschinen, namentlich Dampfmaschinen. Mit Tafeln. 8°. *Leipzig*, 1862.

Verstille, *Mrs.* E. J. Southern cookery; comprising a fine collection of cooking and other receipts valuable to mothers and housekeepers. 12°. *New York*, 1866.

Versuche über Leistung und Arbeitsverbrauch der Werkzeuge. 8°. *Leipzig*, 1873.

VERTEBRATA, North American. By Joseph Jones. **Smithsonian contributions, v. 8.**

—— of the cretaceous formations of the west. By E. D. Cope. *See* UNITED STATES. **Interior dept. Geological survey. F. V. Hayden. Bulletin, v. 1.**

Very, Edward W. Organization of the naval brigade. *See* UNITED STATES. **Navy** dept. Ordnance bureau.

VESSELS. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 19.**

—— of the United States navy, Allowances for the. *See* UNITED STATES. **Navy** department.

Digitized by Google

Vestiges of civilization, or the ætiology of history, religious, æsthetical, political and philosophical. 12°. *New York*, 1851.

—— of the spirit history of man. *See* **Dunlap, S. F.**

Vetch, James. Havens of safety. *See* **Weale's papers on engineering, v. 2.**

—— Malleable iron in the construction of jetties, etc. *See* **Weale's papers on engineering, v. 1.**

VETERINARY art. The American veterinarian. *See* **Estell,** John T.

—— —— Manuel du vétérinaire. *See* **Lebeaud. 73 Manuels Roret.**

—— —— Mulomedicina. *See* **Vegetius,** Publius.

—— instruments. Thierärztliche Instrumente und Verbandlehre. *See* **Forster,** Leopold.

—— medicine, etc. **Abridgments English Patents, No. 53.**

—— —— Manuel de médecine vétérinaire. *See* **Manuel** de médecine.

—— surgeon. Homöopatischer Thierarzt. *See* **Gunthers,** Friedrich August.

Veterum mathematicorum Athenæi, Apollodori, Philonis, Bitonis, Heronis, et aliorum opera. Græce et Latine pleraque nunc primum edita ex manuscriptis codicibus bibliothecæ regiæ. fol. *Parisiis*, 1693.

Vethake, Henry. Dictionary of commerce; ed. by. *See* **McCulloch,** J. R.

—— Encyclopædia Americana; suppl. vol., ed. by. *See* **Encyclopædia.**

—— The principles of political economy. 8°. *Philadelphia*, 1838.

VIADUCTS. Abridgments English Patents, No. 36.

—— Construction der Viaducte von Mauerwerk. *See* **Fontenay** (Toni-).

—— Die Construction von Wegebrücken, über der Bahn, Brückthoren unter der Bahn, und Rampen-Canälen. *See* **Kaven,** A. v.

Vial du Clairbois, —. Traité élémentaire de la construction des vaisseaux. *Illus.* 4°. *Paris*, 1787.

Viardot, Louis. Wonders of Italian art. *Illus.* 12°. *New York*, 1870. **Illustrated library of wonders, v. 2.**

Viaune, Edmond. Journal d'agriculture progressive, sous la direction de. *See* **Journal** d'agriculture.

Vicat, Emanuel. Die neuesten Fortschritte in der Ziegel- und Cementfabrication. *Illus.* 8°. *Leipzig*, 1863. **Th. 3, Neueste Fortschritte in den Gewerben.**

Vicat, L. J. A practical and scientific treatise on calcareous mortars and cements. Transl., with explanatory notes, embracing remarks upon the results of various new experiments; by J. T. Smith. 8°. *London*, 1837.

Victor, *Mrs.* The housewife's manual: or, how to keep house and order at home; how to dye, cleanse and renovate; how to cut, fit, and make garments; how to cultivate plants and flowers; how to take care of birds and household pets. 18°. *New York*, 1865.

VICTORIA (Australia), Gold fields and mineral districts of. *See* **Smyth,** R. Brough.

—— —— Intercolonial exhibition, 1875. By authority of the commissioners. Victorian intercolonial exhibition, preparatory to the Philadelphia exhibition, 1876. Opened 2d September, 1875. Official catalogue of exhibits. 8°. *Melbourne*, 1875.

—— —— London international exhibition of 1873. (Melbourne, 1872-73.) Official record, containing introduction, catalogues, reports, and recommendations of the reports, official rewards of the commissioners, and essays and statistics on the social and economic resources of the colony of Victoria. Published by authority of the commissioners. 8°. *Melbourne*, 1873.

—— —— Patents. Abstracts of specifications of patents applied for, from 1854-1866. 3 v. Pt. 1, Ac. to Bu., 1870. Metals, Pt. 1, by W. H. Archer; Pt. 2, by Richard Gibbs. 4°. *Melbourne*, 1870-76.

—— —— Patents and patentees. A subject matter index. v. 1, 1854-1866. v. 2-8, 1867-1873. By W. H. Archer. v. 8 by Richard Gibbs. 4°. *Melbourne*, 1868-75.

VICTORIA bridge in Canada, Construction of. *See* **Hodges,** James.

Victorious (The) philosophical stone. A treatise more compleat and more intelligible than any yet extant concerning the hermetical magistery. Translated from the French. To which is added, The ancient war of the knights, being an alchymistical dialogue betwixt stone, gold, and mercury. Translated from the German. 18°. *London*, 1740.

Digitized by Google

VIENNA bread, Report on. By E. N. Horsford. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1872, v. 2.**

——— brewery. Malzbereitung und Bierfabrikation mit besonderer Berücksichtigung des Wiener Brauverfahrens. *See* **Thausing**, Julius E.

——— (Exhibition, 1873.) General-Direction der Weltausstellung, 1873. Officieller Ausstellungs-Bericht. Herausgegeben durch die General-Direction der Weltausstellung. 12 Bde. 8°. *Wien*, 1873–76.

CONTENTS.

Gruppe 1:
- Bergbau:
  - Montanproducte. Von Dr. Franz Vivenot.
  - Mineralische Kohle. Von J. Pechar und Dr. A. Peez.
  - Hüttenwesen. Von Franz Kupelwieser.
- Heerwesen. (1–26.) Von Rudolf Potier des Echelles.
- Pavillon des kleinen Kindes. Von Ferdinand Stamm.

Gruppe 2.
- Feldwirthschaftliche Geräthe und Maschinen. Von Ant. Adam Schmied.
- Industrielle Pflanzenstoffe. Von Dr. Julius Wiesner.
- Thierzucht. Von Johann Pohl.
- Forstwirthschaft. Von Johann Newald.
- Wein-, Obst- und Gemüsebau. Von H. Goethe.
- Gartenbau. Von Dr. Eduard Fenzl.

Gruppe 3:
- Apparate der chemischen Grossindustrie. Von Johann Stingl.
- Arzneiwaaren. Von K. D. v. Schroff.
- Fettwaaren. Von Dr. Heinr. Schwarz.
- Zündwaaren und Explosivstoffe. Von Dr. Wilh. Fried. Gintl.
- Appreturmittel und Harzproducte. Von Dr Wilh. Fried. Gintl.

Gruppe 4:
- Mehl. Mehlfabrikate. Müllerei- und Bäckerei-Maschinen. Von Fried. Kick.
- Zucker und Zuckerfabriken. Apparate. Von Josef Hanamann.
- Wein. Von Franz Leibenfrost.
- Bier. Malz. Maschinen für Brauer. Von Gustav Noback.
- Gegohrene Flüssigkeiten. Von Dr. Eduard Schmidt.
- Conserven. Extracte. Fleischwaaren. Von Carl Warhanek.
- Zuckerbäckerei. Von A. Gerstner.
- Tabak und Tabakfabrikate. Von Franz Riedl.

Gruppe 5:
- Schafwolle. Von Dr. Carl Th. Richter.
- Schafwoll-Gewebe. Von C. Falk und Dr. Carl Th. Richter.
- Shawls. Von Emanuel Thieben.
- Baumwolle und Baumwoll-Waaren. Von Dr. Alexander Peez.
- Wirkwaaren. Von Ludwig Glogau.

VIENNA. Exhibition, 1873—Continued.
- Flachs- und Hanf-Industrie. Von Carl v. Oberleithner.
- Congress der Flachsinteressenten. Von Arthur v. Hohenbruck.
- Fertige Kleider:
  - Frauenkleider. Von Ignaz Ortmann.
  - Männerkleider. Von Anton Kreuzig.
  - Kinderkleider. Von Joseph Migotti.
  - Hüte. Von Wilhelm Pless.
  - Handschuhe. Von Frz. und Max Stiasny.
  - Cravaten und Halsbinden. Von Josef Migotti.
  - Mieder. Von Anton Kreuzig.
  - Wäsche. Von Josef Migotti.
- Stickerei und Spitzen. Von Dr. Ferdinand Stamm.
- Frauenarbeiten. Von Helene von Roditzky.
- Schuhwaaren. Von S. Goldschmidt.
- Schmuckfedern. Blumen. Haararbeiten. Von Dr. Carl Th. Richter.
- Tapezierarbeiten und Decoration. Von Anton Fix.

Gruppe 6:
- Leder. Von S. Goldschmidt.
- Rauh- und Kürschnerwaaren. Von J. Max Hirsch.
- Lederwaaren. Von Hermann Lichnovsky.
- Kautschukwaaren. Von Isidor Schnek.

Gruppe 7:
- Goldschmiedekunst. Von Jakob Falke.
- Stahl- und Eisenwaaren. Von F. W. Haardt.
- Kupfer. Zink. Blei Zinn. Nickel. Von Gustav v. Rosthorn.
- Waffen, mit Ausnahme der Kriegswaffen. Von Johann Newald.
- Metallwaaren. Von Carl Haas.
- Lampen und Beleuchtungsapparate. Von Carl Kohn.

Gruppe 8:
- Bautischlerei. Von Wilhelm Flattich.
- Korkwaaren. Korbflechterei. Von Carl Kohn.
- Möbeltischlerei. Von Bernhard Ludwig.

Gruppe 9:
- Thonwaaren-Industrie. Von Dr. Emil Teirich.
- Glasindustrie. Steinwaaren. Von H. Wolf, Jakob Falke, Ludw. Lobmeyr.

Gruppe 10:
- Kurzwaaren:
  - Meerschaum, etc. Von Ludwig Hartmann.
  - Bronze und Ledergalanterie. Von J. Weidmann.
  - Kinderspielwaaren. Von Carl Th. Richter.

Gruppe 11:
- Papier-Industrie. Von Emil Twerdy.
- Tapeten und Buntpapier. Von Dr. Wilh. Frz. Exner.
- Schreib-, Zeichen- und Maler-Requisiten. Von Ignaz Nagel.
- Buchbinderei und Maschinen. Von Conrad Berg.

Gruppe 12:
- Buchdruck. Von Ludwig Lott.
- Kupfer- und Stahlstich-Druck. Von Louis Jakoby.
- Lithographie und Chromographie. Von Conrad Grefe.

Digitized by Google

VIENNA. Exhibition, 1873.—Continued.

Graveur- und Guillochirarbeiten. Von J. Schwerdtner.
Photographie. Von Josef Löwy.
Musterzeichnungen und Decorationsmalerei. Von F. Lieb.

Gruppe 13:
Maschinenwesen:
Dampfkessel. Von J. F. Radinger.
Kessel-Armaturen. Von Victor Novelly.
Motoren. Von J. F. Radinger.
Thonwaarenindustrie. Von Dr. Emil Teirich.
Holzbearbeitung. Von Dr. W. F. Exner.
Spritzen und Pumpen. Von Peter Zwiauer.
Maschinen:
Maschinen der Weberei. Von Johann Zeman.
Maschinen der Spinnerei. Von Johann Zeman.
Näh-, Strick- und Stickmaschinen. Von Carl Kohn.
Transportmittel. Von Emil Tilp.
Strassen-Fuhrwerke. Von M. B. Rideli.

Gruppe 14:
Instrumente:
Mathematische und physikalische. Von Ferdinand Lippich.
Astronomische und geodätische. Von Dr. W. Tinter.
Optische und akustische. Von Leander Ditscheiner.
Magnetische und elektrische. Von Dr. A. v. Waltenhofen.
Uhren. Von W. Schönberger.
Telegraphische. Von Leander Ditscheiner.
Chirurgische und prothetische. Von Dr. Mosetig v. Moorhof.
Oculistische. Von Dr. Hans Adler.
Laryngoskopie und Rhinoskopie. Von Dr. Mosetig v. Moorhof.
Electrotherapie. Von Dr. Moriz Benedikt.

Gruppe 15: Musikalische Instrumente. Von Eduard Schelle.

Gruppe 16:
Heeresbekleidung und Ausrüstung. Von Carl Mayer.
Heeresverpflegswesen. Von Alexander Popović.
Allgemeine Bewaffnung und Artillerie. Von G. Semrad und Johann Sterbenz.
Militair-Sanität. Von Dr. Mosetig v. Moorhof.
Genie- und Pionierwesen.
Sprengtechnik. Von Johann Lauer.
Fortification. Von Moriz Brunner.
Brücken. Landcommunicationen. Von Emerich Zinner.
Militair-Unterrichtswesen. Von Moriz Brunner.

Gruppe 17: Marinewesen. Von Alexander Friedmann.

Gruppe 18:
Apparate und Anlagen von Wasserleitungen. Von C. Frischauf.
Eisenbahn-Unter- und Oberbau. Von Franz Rziha.

Gruppe 19: Das bürgerliche Wohnhaus. Von Dr. Carl Th. Richter.

VIENNA. Exhibition, 1873.—Continued.

Gruppe 20:
Das Bauernhaus. Von Dr. K. J. Schröer.
Geschichte der Preise. Von Carl Theod. v. Inama-Sternegg.
Welthandel. Von Dr. Carl Th. Richter.
Russland. Von Wilhelm v. Lindheim.
Türkei. Von Carl Sax.
Rumänien. Von Ernest Haan.
Persien. Von Dr. J. E. Polak.

Gruppe 21: Die nationale Hausindustrie. Von Dr. Carl Th. Richter.

Gruppe 22: Museen der Kunst und Gewerbe. Von Dr. Carl Th. Richter.

Gruppe 23: Kirchliche Kunst. Von Hans Petschnig.

Gruppe 24: Objecte der Kunst etc. früherer Zeiten Von Dr. Carl Lind.

Gruppe 25: Bildende Kunst. Malerei. Sculptur. Von Jos. Bayer und Jos. Langl.

Gruppe 26:
Volks- und Mittelschule:
Bauten und Einrichtungen. Von Dr. Erasmus Schwab.
Lehrmittel:
Geographie. Von Dr. R. Perkmann.
Naturgeschichte. Von Dr. A. Pokorny.
Mathematik. Von Josef Knirr.
Das gewerbliche Unterrichtswesen. Von Armand v. Dumreicher.
Landwirthschaftliche Lehre. Von Prof. Dr. C. Th. v. Gohren.
Universitäten. Von Dr. Wilhelm Hartel.
Allgemeine Bildungsmittel:
Verlags-Buchhandel. Von Rudolf Lechner.
Buchhandel des Auslandes. Von Alfred Klaar.
Bibliotheken, Vereine, etc. Von Dr. Carl Th. Richter.
Leistungen der Statistik. Von J. Löwenthal.
Geographie. Von Anton Steinhauser.
Musik. Von Rudolf Weinwurm.
Unterricht in der Geschichte. Von Dr. Emanuel Hannak.
Unterricht im Schreiben. Von J. Hüpscher.
Zeichnen und Kunstunterricht Von. J. Langl.

——— Exhibition, 1873. Official catalogue of the American department. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873.**

——— ——— Report of the commissioner of Massachusetts. *See* MASSACHUSETTS.

——— K. k. geographische Gesellschaft. Mittheilungen, redigirt von Franz Foetterle. Jahrg. 1–17, 1857–1875. [Jahrg. 11 begins new series.] 8°. *Wien*, 1857–75——.

——— K. k. geologische Reichsanstalt. Catalog ihrer Ausstellungs-Gegenstände bei der Wiener Weltausstellung, 1873. 8°. *Wien*, 1873.

——— ——— Jahrbuch. Jahrgang 1–26. 8°. *Wien*, 1850–76——.

Digitized by Google

VIENNA. K. k. Landwirthschafts-Gesellschaft. Verzeichniss der Werke in der Bibliothek. 8°. *Wien*, 1843.

——— K. k. zoologisch-botanische Gesellschaft. Nachträge zu Maly's Enumeratio plantarum phanerogamicarum imperii austriaci. *See* **Neilreich**, A.

——— ——— Verhandlungen. *Illus.* B. 1-26. 8°. *Wien*, 1851-76——.

——— K. k. zoologisch-botanischer Verein. Bericht über die österreichische Literatur der Zoologie, Botanik und Palaeontologie aus den Jahren 1850-1853. 8°. *Wien*, 1855.

——— ——— Personen-, Orts- und Sach-Register der fünf ersten Jahrgänge, 1851-1855, der Sitzungsberichte und Abhandlungen. Zusammengestellt von A. F. Marschall. 8° *Wien*, 1857.

——— ——— Separatabdruck naturwissenschaftlicher Abhandlungen. 8°. *Wien*, 1856.

——— Österreichischer Ingenieur-Verein. Zeitschrift. Redigirt von Amédée Demarteau. Jhrg. 1-28. 4°. *Wien*, 1849-76——.

——— Report on private dwellings in. By J. R. Niernsee. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

VILLA and cottage florist's directory. *See* **Main**, James.

——— cottage, farm and village architecture and furniture. *See* **Loudon**, J. C.

——— rustica. *See* **Parker**, Charles.

Villaret and **Normandin.** Das Haar als Schmuck oder Handbuch der Frisirkunst. *Illus.* 8°. *Ilmenau*, 1829. **42 Neuer Schauplatz der Künste.**

VILLAS, Designs for cottages and. *See* **Walter**, T. U., and **Smith**, J. J.

——— Roman, An essay on. *See* **Moule**, Thomas.

Ville, Georges. Traité de photographie sur papier. *See* **Blanquart-Évrard**, M.

Villeroy, Félix. Manuel de l'éleveur de bêtes à cornes. 2e éd. 12°. *Paris, n. d.* **T. 27 Bibliothèque du cultivateur.**

Villette, M., and sons, Description of the burning glass made by. *See* **Description.**

Villiers, Alexandre de. Nouveau manuel de géographie. *Illus.* 4e éd. 18°. *Paris*, 1835. **11 Manuels Roret.**

Vilmorin-Andrieux et cie. Description des plantes potagères. 18°. *Paris*, 1856. [2 copies.]

——— Les fleurs de pleine terre, comprenant la description et la culture des fleurs annuelles, vivaces et bulbeuses de pleine terre; suivies de plans de jardin, etc. 16°. *Paris*, 1863.

Vincendon-Dumoulin, Clément Adrien. Dictionnaire des arts, etc. *See* **Laboulaye**, C. P. L.

Vincent, —. Encyklopädie der Landwirthschaft. *See* **Schnee**, G. H.

Vincent, Benjamin. Dictionary of dates; ed. by. *See* **Haydn**, J.

Vincent, Jacques. La pyrotechnie, ou art du feu. *See* **Biringuccio**, Vanoccio.

VINE, culture and products of, Report on. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

——— ——— Der Weinbau des österreichischen Kaiserthums. *See* **Heintl**, Franz von.

——— ——— Der Weinbau und die Weinbereitungskunde. *See* **Mohr**, Frederick.

——— dresser's guide, The American. *See* **Loubat**, Alphonse.

——— The grapevine. *See* **Mohr**, Frederick.

VINEGAR. Die Essigfabrikation, die Zucker- und Stärkefabrikation, etc. *See* **Otto**, Friedrich Julius.

——— Études sur le vinaigre, sa fabrication, etc. *See* **Pasteur**, M. L.

——— Handbuch der Essig-Bereitung. *See* **Julia de Fontenelle**, J. S. E. **33 Neuer Schauplatz der Künste.**

——— Manuel du vinaigrier. *See* **Julia de Fontenelle**, J. S. E. **99 Manuels Roret.**

——— Manufacture of. *See* **Dussauce**, H.

——— Manufacture of. *See* **Wetherill**, C. M.

VINEYARDS, Three seasons in European. *See* **Flagg**, William J.

Violette, H. Nouvelles manipulations chimiques simplifiées, ou laboratoire économique de l'étudiant; 2e éd., revue et augmentée de plusieurs appareils, expériences et procédés nouveaux. *Illus.* 8°. *Paris*, 1847.

VIOLIN, The. *See* **Hart**, George.

——— History of the. *See* **Sandys**, W., and **Forster**, Simon A.

——— Lehrbuch der Anfertigung von Geigen. *See* **Wettengel**, G. A. **37 Neuer Schauplatz der Künste.**

Digitized by Google

VIOLIN. Manuel du luthier. *See* **Maugin,** J. C. **51 Manuels Roret.**

——— Treatise on the. *See* **Otto,** Jacob A.

——— Die Violine. *See* **Abele,** Hyacinth.

Viollet, J. B. Dictionnaire de l'industrie. *See* **Baudrimont,** A., and others.

——— Rauchverzehrende Oefen. *See* **Combes,** Charles, and **Viollet,** J. B. **226 Neuer Schauplatz der Künste.**

Virchow, Rudolph. Reinigung und Entwässerung Berlins. 8°. *Berlin,* 1873.

Virey, J.-J. Traité complet de pharmacie théorique et pratique contenant les élémens, l'analyse et les formules de tous les médicaments, leurs préparations chimiques et pharmaceutiques, avec l'explication des phénomènes, les propriétés, les doses, les usages, les détails relatifs aux arts qui se rapportent à la pharmacie; avec les formules en poids métriques en regard des poids anciens. T. 1–2. Nouvelle éd. 8°. *Paris,* 1840.

Virgilius Maro, Publius. The first six books of the Æneid, together with the first, second and fourth Eclogues, with explanatory notes in English. By R. W. McFarland. 8°. *Cincinnati,* 1849.

VIRGINIA. History of the line betwixt North Carolina and Virginia. *See* **Byrd,** W.

——— mineral springs. *See* **Burke,** William.

——— springs. *See* **Moormann,** John J. [†]

VISIBLE numerator, The. *See* **Shaw,** Oliver A.

VITAL and physical forces, The correlation of. *See* **Barker,** George F. **University series, No. 2.**

Vitalis, J. B. Lehrbuch der gesammt-n Färberei auf Wolle, Seide, Leinen, Hanf und Baumwolle. Nebst einem Anhange über Kattun-Druckerei, nach dem Französischen bearbeitet von C. H. Schmidt. *Illus.* 8°. *Weimar,* 1847. **6 Neuer Schauplatz der Künste.**

Vitruvius Pollio, Marcus. L'architettura di M. Vitruvio Pollione, colla traduzione italiana del Berardo Galiani. fol. *In Napoli,* 1758.

——— Les dix livres d'architecture. Traduit avec notes, par M. Perrault. 2e éd. fol. *Paris,* 1684.

Vivenot, Franz. Bergbau and Hüttenwesen. Montanproducte. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

Vocabulary (A) of sea phrases and terms of art used in seamanship and naval architecture. v. 1, 2. 1. English and French. 2. French and English. By a captain of the British navy. 12°. *London,* 1799.

VOCAL gymnastics. *See* **Comstock,** Andrew.

Vogel, August. Beitrag zur Kenntniss der oxalsauren Salze. 4°. *München,* 1855. pp. 30. **Aus den Abhandlungen der k. bayr. Akademie der W., 2. Cl., 7. Bd., 3. Abth.**

——— Experimentelle Beiträge zur Beurtheilung hygrometrischer Methoden, mit Tabelle. 4°. *München,* 1857. pp. 17. **Aus den Abhandlungen der k. bayr. Akademie der W., 2. Cl., 8. Bd., 2. Abth.**

——— Ueber den Chemismus der Vegetation. Festrede zur Vorfeier des Geburtstages Seiner Majestät Maximilian II. Königs von Bayern gehalten in der öffentlichen Sitzung der k. bayr. Akademie der W. am 27. Nov. 1852. 4°. *München,* 1852. pp. 29.

——— Ueber die Zersetzungen salpetersaurer Salze durch Kohle. 4°. *München,* 1855. pp. 31. **Aus den Abhandlungen der k. bayr. Akademie der W., 2. Cl., 7. Bd., 3. Abth.**

——— and **Reischauer,** G. C. Ueber Bleysesquiphosphat. 4°. *München,* 1856. pp. 36. **Aus den Abhandlungen der k. bayr. Akademie der W., 2. Cl., 8. Bd., 1. Abth.**

Vogel, Friedrich Wilhelm. Handbuch der Bienenzucht, oder vollständige Anleitung zur naturgemäss-rationellen und einträglichen Pflege der Honigbiene in allen praktischen Stockformen. *Illus.* 8°. *Berlin,* 1867.

Vogel, Hermann. The chemistry of light and photography. 12°. *New York,* 1875. **International scientific series, v. 14.**

——— Handbook of the practice and art of photography. Transl. from the German by Edward Moelling. 8°. *Philadelphia,* 1871.

——— Die Photographie auf der Londoner Weltausstellung des Jahres 1862. *Illus.* 8°. *Braunschweig,* 1863.

——— Photographische Mittheilungen. *See* **Photographische.**

Vogel, Max. Die Entwicklung der Anilin-Industrie; die Anilinfarben, ihre Entste-

Digitized by Google

Vogel, Max.—Continued.
hung, Herstellung und technische Verwendung. 8°. *Leipzig*, 1866.

Vogler, C. Medicinische Jahrbücher; hrsg. v. *See* NASSAU.

VOICE, Hygiene of the. *See* **Durant,** Ghislani.

——— in singing, The. *See* **Seiler,** Emma.

——— Vocal sounds of Laura Bridgeman. By F. Lieber. **Smiths'n contrib., v. 2.**

——— Voces variæ animantium. *See* **Wackernagel,** Wilhelm.

Voigt, Bernhard Fr. Journal für Metallarbeiter jeder Gattung. Hrsg. von Carl Hartmann. B. 1–5. B. 6, H. 1–2. *Illus.* 4°. *Weimar*, 1846–54.

——— Neuer Schauplatz der Künste, etc. *See* **Neuer Schauplatz.**

——— Neues Journal der gesammten Gerberei. Hrsg. von C. H. Schmidt. B. 1–4. [B. 2 and 4 ed. by C. A. Hartmann.] *Illus.* 4°. *Weimar*, 1846–53.

——— Zeitschrift für Chaisenfabrikanten, Stellmacher, Schmiede, Riemer und Sattler. Hrsg. von C. H. Schmidt und C. Hartmann. B. 1–3. B. 4, H. 1–4. 4°. *Weimar*, 1847–52.

——— Zeitschrift für Klempner, Kupferschmiede, Lampenfabricanten und Gasbeleuchtung. Hrsg. von C. H. Schmidt. B. 1–4. B. 5, H. 1, 2. [B. 2–5 ed. by C. F. Hartmann. *Illus.* 4°. *Weimar*, 1845–53.

——— Zeitung für Dampfmaschinenkunde, Dampfschifffahrt und Eisenbahnwesen. Hrsg. von Carl Hartmann. B. 1–5. B. 6, H. 1–5. *Illus.* 8°. *Weimar*, 1845–53.

Voigt, F. H. Weberei als Handwerk, Kunst und Fabrikgewerbe. B. 1. Kunst-Weberei auf Handstühlen. B. 2. Die mechanische Weberei nach englischer, französischer und deutscher Schule bis auf die neuesten Erfindungen. Mit Benutzung der besten englischen und französischen Werke, wie einer achtzehnjährigen praktischen Erfahrung und Kenntniss deutscher Webereien, insbesondere der sächsischen Weber-Industrie. Mit einem Anhang, enthaltend: Schema's zur Geschäfts- und Buchführungs, Mass- und Gewichtstabellen, Produktions-Tabellen, Kalkulationen, und Kostenanschläge. B. 3. Geschäftsbetrieb der Weberei. Nebst Atlas. *Illus.* 8°. *Weimar*, 1862–69. **256–258 Neuer Schauplatz der Künste.**

VOLATILE oils and essences. Manufacture and distillation of alcoholic liquors. *See* **Duplais,** *aîné et jeune.*

VOLCANOES, An account of German, etc. 12°. *n. t. p.* [†]

——— A description of active and extinct. *See* **Daubeny,** Charles.

Völckers, J. Der Indicator. Anleitung zum Gebrauch desselben bei der Prüfung von Dampfmaschinen und zur Ermittelung des Kraftbedarfs von Arbeitmaschinen. Vorwort von F. Grashof. *Illus.* 8°. *Berlin*, 1863.

Vollkommene (Die) Linirkunst. Nach dem Französischen bearbeitet von Carl Ferdinand Leischner. 2te Aufl. von J. G. Frenzel. 8°. *Weimar*, 1839. **41 Neuer Schauplatz der Künste.**

Vollkommener Parfümeur. Aus dem Französischen. 2te Aufl. *Illus.* 8°. *Weimar*, 1848. **16 Neuer Schauplatz der Künste.**

Vollständige theoretisch-praktische Anleitung zur Verfertigung aller Arten Pappearbeiten. Nach dem Französischen bearbeitet von C. F. Leischner. 2te Aufl. von C. Schmied. *Illus.* 8°. *Weimar*, 1844. **59 Neuer Schauplatz der Künste.**

Vollständiger Schreibmaterialist, oder die Kunst, sich selbst alle Arten der trefflichsten Schreibfedern, Siegellacke, Tinten von allen Farben, Oblaten und andere Bureaumaterialien zu fertigen. 2te Aufl. *Illus.* 8°. *Weimar*, 1849. **176 Neuer Schauplatz der Künste.**

Vollständiges und ausführliches Handbuch der Handschuhfabrikation und der Kunst, das Handschuhleder zu gerben und zu färben. Nebst einem Anhange, alle Flecken in den Handschuhen zu verhüten und die entstandenen wieder zu beseitigen von Vallet d'Artois. Nach dem Französischen übersetzt mit Verbesserungen und Zusätzen von Heinrich Leng. *Illus.* 8°. *Weimar*, 1836. **84 Neuer Schauplatz der Künste.**

VOLUMETRIC analysis, Hand book of. *See* **Scott,** Robert H.

——— ——— Kurzgefasstes Lehrbuch der Massanalyse. *See* **Fleischer,** Emil.

——— ——— Praktische Anleitung zu Maassanalysen. *See* **Schwarz,** H.

——— ——— Systematic handbook of. *See* **Sutton,** Francis.

Digitized by Google

VOLUMETRIC analysis. Die Titrirmethode, als selbstständige quantitative Analyse. *See* **Fleischer**, Emil.

——— ——— Die Volumetrie, oder chemische Maassanalyse zum Gebrauch im Laboratorium. *See* **Rieth**, R.

VOLUNTEERS, Dictionary of the distinguished officers of the. *See* **Gardner**, C. K. Dictionary of the army.

Von Scheliha, —. A treatise on coast defence; based on experience. roy. 8°. *London*, 1868.

VORARLBERG. Zeitschrift des Ferdinandeums. *See* TYROL.

Vorschule der Thierkunde. Aus dem Englischen, von Franz Kottenkamp. *Illus.* 16°. *Stuttgart*, 1847. **Wochenbände**, 74–84.

Vose, George L. A graphic method of solving certain algebraic problems. *Illus.* 18°. *New York*, 1875. **Van Nostrand's science series. No. 16.**

——— Handbook of railroad construction; containing the necessary rules, tables and formulæ for the location, construction, equipment, and management of railroads, as built in the United States. *Illus.* 8°. *Boston*, 1857.

VOUSSOIR arches, Practical theory of. *See* **Cain**, William. **Van Nostrand's science series, No. 12.**

VOYAGER'S companion; or shell collector's pilot. *See* **Mawe**, John.

VOYAGES. *See, also*, **Travels.**

——— Journal of a voyage round the world. *See* **Scoresby**, W.

——— Narrative of the United States exploring expedition. *See* **Wilkes**, C.

——— Voyage d'exploration sur le littoral de la France et de l'Italie. *See* **Coste.**

——— Voyage round the world. *See* **Portlock**, Nathaniel.

——— Voyages scientifiques. *See* **Arago**, Franç is.

Vredeman, Jan. Perspective [5e] 6e partie de Ioan Vredem, Vriese. Augmentée et corrigée en divers endroits, par Samuel Marolois. l. fol. 1615.

——— and Paul. Architectura; complectens quinque modos ædificiorum: cum doctrina & præceptionibus Vitruvii. Heic itidē adjuncta sunt multa: monumenta ad normam antiquitatis, nec non quædam ædificia seu structuræ ex ratione horum temporum. Hæc omnia ex invento Jo-

Vredeman, Jan.—Continued.
hannis Vredeman Phrisii & Paoli Vredemanni ejus filij. fol. [*Hagæ comitis*, 1607.] [Bound with Vredeman's Perspective.]

Vredeman, Paul. Architectura. *See* **Vredeman**, Jan.

Vriend van den landman. Tijdschrift ter bevordering van landhuishoudelijke kennis in Nederland; onder redactie van R. C. en F. A. Enklaar. Deelen 22–27, 1858–63. 8°. *Zwolle*, 1858–63.

VULGAR tongue, A classical dictionary of. *See* **Grose**, Francis.

——— tongue, Our. *See* **Lysons**, Samuel.

Vulgarisms and other errors of speech. 2d ed. 18°. *Philadelphia*, 1869.

W., C. An inquiry into the difference of style observable in ancient glass paintings, especially in England. Part 1, text; part 2, plates. 8°. *Oxford*, 1848.

Waby, Gustav. Landwirthschaftliche Betriebslehre. 8°. *Stuttgart*, 1867.

Wachter, J. P., *jr.* Plan for preventing railway trains from running off the rails, and for stopping them instantaneously. *Illus.* 8°. *Rotterdam*, 1852. pp. 14.

Wackenroder, B. Die Polarisationsdifferenzen beim Rohzucker Handel, deren Ursachen und Abhilfe. 8°. *Bernburg*, 1877. pp. 31.

Wackernagel, Wilhelm. Voces variæ animantium. Programm für die Rectoratsfeier der Universitaet. 4°. *Basel*, 1867.

Wade, John. British history, chronologically arranged, to 1847. 5th ed. 8°. *London*, 1847.

Wagner, Andreas. Denkrede auf Gotthilf Heinrich v. Schubert, gehalten in der öffentlichen Sitzung der k. bayer. Akademie der Wissenschaften am 26. März 1861. 4°. *München*, 1861.

——— Monographie der fossilen Fische aus den lithographischen Schiefern Bayerns. Bearbeitet von. 2te Abth. 4°. *München*, 1863. **Abhandlungen der k. bayer. Akademie der W., 2. Cl., 9. Bd., 3. Abth.**

——— Neue Beiträge zur Kenntniss der fossilen Säugthier-Ueberreste von Pikermi. *Illus.* 4°. *München*, 1857. **Abhandlungen der k. bayer. Akademie der W., 2. Cl., 8. Bd., 1. Abth.**

Digitized by Google

Wagner, Andreas. Neue Beiträge zur Kenntniss der urweltlichen Fauna des lithographischen Schiefers. 1ste Abth. Saurier. 2te Abth. Schildkröten und Saurier. 4°. *München*, 1858–61. **Abhandlungen der k. bayer. Akademie der W., 2. Cl., 8. Bd., 2. Abth.**

Wagner, Fr. Sammlung von Originalzeichnungen zu dekorirten und verzierenden Stubenöfen, Kaminen und Kaminöfen in gebranntem und glasirtem Thon: Construction des Innern, so wie des Aeussern derselben in den verschiedenen Baustylen darstellend. Nebst architectonischen Details. Heft 1–3. 4°. *Berlin*, 1846–47.

Wagner, Heinrich. Licht und Feuer oder die Feuerzeugfabrikation vom Standpunkte ihrer gegenwärtigen Entwicklung theoretisch und praktisch beschrieben. Nebst Anleitung zur Prüfung und Darstellung der hierbei angewandten Materialien; mit besonderer Berücksichtigung der in den Phosphorzündholzfabriken vorkommenden Krankheiten und wie denselben zu begegnen ist. Nebst einen Anhang über das metrische Mass- und Gewichts System. *Illus.* 8°. *Weimar*, 1869. **289 Neuer Schauplatz der Künste.**

Wagner, Hermann. Der gelehrte Spielkamerad oder der kleine Naturforscher, Thierfreund und Sammler. Anleitung für kleine Physiker, Chemiker, Botaniker und Naturfreunde zum Experimentiren, zur Anlage von Pflanzen-, Stein-, Muschel-, Insekten-, Schmetterling-, Vogel-, Briefmarken-Sammlungen, etc. Sowie zur Pflege der Hausthiere und des Hausgartens. Ein Supplement zum 'Spielbuch für Knaben'. Hrsg. von. *Illus.* 8°. *Leipzig*, 1865. [?]

——— Illustrirtes Spielbuch für Knaben, 1001 unterhaltende und anregende Belustigungen, Spiele und Beschäftigungen für Körper und Geist, im Freien sowie im Zimmer. Hrsg. von. *Illus.* 2te Aufl. 8°. *Leipzig*, 1864. [?]

Wagner, Johannes Rudolf. Die chemische Fabrikindustrie für den Selbstunterricht für Chemiker und Techniker, sowie zum Gebrauche an Universitäten und technischen Lehranstalten. 8°. *Leipzig*, 1869.

——— Die chemische Technologie, nach dem gegenwärtigen Standpunkte der Theorie und Praxis der Gewerbe. 8°. *Leipzig*, 1866.

——— Jahres-Bericht über die Fortschritte und Leistungen der chemischen Technologie und technischen Chemie. Hrsg. von. Jahrg. 1–22, 1855–77. [v. 16 begins new series. General register, 1–10, 1866; 11–20, 1876.] *Illus.* 8°. *Leipzig*, 1856–77 ——.

——— Technologische Studien auf der allgemeinen Kunst- und Industrie-Ausstellung zu Paris im Jahre 1867. 8°. *Leipzig*, 1868.

Wagner, Ladislaus von. Handbuch der Stärkefabrikation verwandten Industriezweige namentlich der Dextrin-, Stärkesyrup- und Stärkezuckerfabrikation. Auf Grund eigener Erfahrungen sowie Benutzung der neuesten deutschen, französischen und englischen Literatur. *Illus.* 8°. *Weimar*, 1876. **39 Neuer Schauplatz der Künste.**

WAGON making. Album der Musterzeichnungen für Wagenbauer. *See* **Album.**

Wahnschaffe, M. Repertorium der 23 ersten Jahrgänge der entomologischen Zeitung; ausgearb. v. *See* STETTIN.

Waite, George. A critical inquiry into a few facts connected with the teeth. 8°. *Baltimore*, 1846. **American library of dental science, v. 7.**

WAKEFULNESS. *See* **Hammond,** William A.

Wakley, Thomas. The Lancet. *See* **Lancet.**

Walckenaer, C. A. Tableau des aranéides, ou caractères essentiels des tribus, genres, familles et races que renferme le genre aranea de Linné, avec la désignation des espèces comprises dans chacune de ces divisions. *Illus.* 8°. *Paris*, 1805.

Waldack, Charles. Treatise on photography. 12°. *Cincinnati*, 1860.

——— and **Neff,** Peter, *jr.* Treatise of photography on collodion. 2d ed. 12°. *Cincinnati*, 1858.

WALDECK. Landwirthschaftlicher Verein im Fürstenthum Waldeck. Blätter. Redigirt von der Direktion. 8 Bde., 1845–59. 8°. *Mengeringhausen*, 1845–59.

Wales, Philips S. Mechanical therapeutics; a practical treatise on surgical apparatus, appliances and elementary

Digitized by Google

Wales, Philips S.—Continued.
operations; embracing bandaging, minor surgery, orthopraxy, and the treatment of fractures. 8°. *Philadelphia*, 1867.

Walk (A) through the universal exhibition of 1855. 16°. *Paris*, 1855.

Walker, Amasa. The science of wealth; a manual of political economy, embracing laws of trade, currency, and finance. 8°. *Boston*, 1866.

Walker, Bethune J. A code of signals, for the use of the mercantile navy. 8°. *London*, 1841.

Walker, Charles. Die Galvanoplastik. Nebst ergänzenden Zusätzen des Uebersetzers, und einem kurzen Ueberblicke, über die mit der Galvanoplastik verwandte Daguerreotypie und Kalotypie. Nach der 10ten Aufl. des englischen Werkes des Charles Walker deutsch bearbeitet von C. H. Schmidt. *Illus.* 8°. *Weimar*, 1843. **123 Neuer Schauplatz der Künste.**

Walker, Charles V. Electrical magazine; by. *See* **Electrical.**

——— Electrotype manipulations: instructions in the art of working in metals, by precipitating them from their solutions, through the agency of galvanic or voltaic electricity; also in the arts of electroplating, electro-gilding and electro-etching; with mode of depositing metallic oxides; and of several applications of electrotypes in the arts. *Illus.* 2d Amer. from 25th Eng. ed. 1 v., 2 pts. 12°. *Philadelphia*, 1852.

——— Manual of electricity, magnetism and meteorology. *See* **Lardner,** D. **Lardner's cabinet cyclopædia, v. 108, 109.**

——— Proceedings of the London electrical society; ed. by. *See* LONDON. **Electrical society.**

——— Treatise on electricity; transl. by. *See* **La Rive,** A. de.

Walker, Francis A. The world's fair. Philadelphia, 1876. A critical account. 8°. *New York, Chicago, and New Orleans*, 1878.

Walker, J. T. Account of the operations of the great trigonometrical survey of India. The standards of measure and the base lines; also an account of the early operations of the survey, during 1800–1830. 4°. *Dehra Doon*, 1870.

Walker, John. A critical pronouncing dictionary and expositor of the English language: to which are prefixed, principles of English pronunciation. To which is annexed a key to the classical pronunciation of Greek, Latin and Scripture proper names. 8°. *New London*, 1836. Later ed., 1839.

——— Key to the pronunciation of classical and Scripture proper names. *See* **Worcester,** J. E.

Walker, Richard. An account of some remarkable discoveries in the production of artificial cold; with experiments on the congelation of quicksilver, in England. 8°. *Oxford*, 1796.

Walker, Sears C. Ephemeris of the planet Neptune. **Smiths'n contrib., v. 2, 3.**

——— Researches relative to the planet Neptune. **Smiths'n contrib., v. 2.**

Walker, W. E. The tailor's philosophy, or science complete in the art of cutting; in which the unerring principles of science are fully attained, hitherto unknown, but now made clear and easy to the most simple capacity, as well for the use of young beginners, as for those who have been in constant practice all their lifetime. *Illus.* 2d ed. 8°. *London and Dublin*, 1844.

Walkhoff, Louis. Der praktische Rübenzuckerfabrikant; bearbeitet von. Mit einem Vorwort von Franz Julius Otto. *Illus.* 8°. *Braunschweig*, 1857. Another ed., 1872.

Wall, Alfred H. A manual of artistic colouring, as applied to photographs. 8°. *London*, 1861.

WALL paper. Tapeten- und Buntpapier-Industrie. *See* **Exner,** W. F. **25 Neuer Schauplatz der Künste.**

——— Sea, on Lovell's island. By S. Thayer. *See* UNITED STATES. **War dept. Bureau of engineers. Papers on eng., No. 2.**

Wallace, —. Encyclopædia of geography, astronomy, etc. *See* **Murray,** H.

Wallace, Alfred Russel. The action of natural selection on man. 1. The development of human races under the law of selection. 2. The limits of natural selection as applied to man. 12°. *New Haven*, 1871. **University series, No. 6.**

——— The Malay archipelago; the land of the orang-utan and the bird of paradise. A narrative of travel, with studies of man and nature. 2 v. 12°. *London*, 1869.

Digitized by Google

Wallace, —, and **Johnson,** —. Telegraphic cypher. 18°. *New York and Chicago,* 1867.

Wallace (The) piano-forte co., for manufacturing S. B. Driggs' newly invented and perfected square and grand piano-fortes. 8°. *New York,* 1857. pp. 23.

Wallace, W. History of England; continued by. *See* **Mackintosh,** *Sir* J. **Lardner's cabinet cyclopædia, v. 3–12.**

Wallack, August. Vollständiges Handbuch des Gürtlers und Broncearbeiters. *Illus.* 8°. *Weimar,* 1840. **108 Neuer Schauplatz der Künste.**

Wallich, N. Report on the botanic gardens, Calcutta. *See* CALCUTTA.

Wallis, George. The industry of the United States. *See* **Whitworth,** J.

WALLS, retaining, Practical designing of. *See* **Jacob,** Arthur. **Van Nostrand's science series, No. 3.**

—— —— Surcharged and different forms of. *See* **Tate,** James S. **Van Nostrand's science series, No. 7.**

—— Sustaining; geometrical constructions to determine their thickness. *See* **Poncelet,** Jean Victor. **Papers on practical engineering, No. 3.**

Walsh, John Henry, [*pseud. Stonehenge*]. British rural sports. 12°. *London,* 1867.

—— Shot gun and sporting rifle, and the dogs, ponies, ferrets, etc., used with them in the various kinds of shooting and trapping. By Stonehenge. *Illus.* 8°. *London,* 1859.

Walsh, M. McN. The lawyer in the schoolroom; comprising the laws of all the states, on important educational subjects. 12°. *New York,* 1867.

Waltenhofen, A. v. Magnetische und electrische Apparate. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Walter, Thomas. Flora Caroliniana secundum systema vegetabilium perillustris Linnæi digesta. Characteres essentiales naturalesve et differentias veras exhibens. 8°. *Londini,* 1788.

Walter, Thomas U., and **Smith,** J. Jay. A guide to workers in metals and stone: from original designs and selections. Nos. 1–4. *Illus.* 4°. *Philadelphia,* 1846.

Walter, Thomas U., and **Smith,** J. Jay. Two hundred designs for cottages and villas, etc. Nos. 1–4. *Illus.* 4°. *Philadelphia,* 1846.

Walters, W. W. Mechanical calculator. 4°. *Cincinnati,* 1846.

Walther, F. H. The horse owner's guide; or practical instructions in the horseman's points. The horse in health, in sickness; the teeth, hoofs, age of the horse; treatment of his diseases; how to buy a horse, etc. 8°. *Boston,* 1861.

Walton, George A. The metric system of weights and measures. 12°. *Boston,* 1867. pp. 24.

—— and **Electa,** N. L. The illustrative practical arithmetic, by a natural method, with dictation exercises. 8°. *Boston,* 1869

Walton, Isaac, and **Cotton,** Charles. The complete angler; or the contemplative man's recreation; instructions how to angle for a trout or grayling in a clear stream. With notes and a bibliographical preface, and a notice of Cotton and his writings; by the American editor. 2 v. 12°. *New York and London,* 1847.

Walz, G. L. Praktisches Rechenbuch, für deutsche Elementarschulen in den Vereinigten Staaten. 12°. *New York,* 1851.

Wangenheim, Ernst. Fabrikation künstlicher Brennmaterialien, der Pariser Kohlen, Paras, Briquettes, Kohlensteine und Kohlenziegel; von Holz-, Holzkohlen- und Steinkohlenabfällen, mit Theer und andern Substanzen. 8°. *Weimar,* 1861. **254 Neuer Schauplatz der Künste.**

WAR, Art of. *See* **Graham,** J. J.

—— chess, or the game of battle. *See* **Richardson,** Charles.

—— Curiosities of. *See* **Carter,** Thomas.

—— Engines of. *See* **Jervis-White-Jervis,** H.

—— Engines of. *See* **Wilkinson,** H.

—— Implements of. *See* **Forrest,** R.

—— in Europe, 1855–56, Report on the. *See* **McClellan,** George B.

—— in Europe, 1855–56, Report on the. *See* **Mordecai,** Alfred.

—— Munitions of; exhibited, Paris, 1867. By C. B. Norton and W. J. Valentine. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

—— New resources of warfare. *See* **Scoffern,** J.

—— Projectile weapons of. *See* **Scoffern,** J.

Digitized by Google

WAR, The special operations of. *See* **Lippitt**, Francis J.

Ward, *Hon. Mrs.* The microscope, or descriptions of various objects of especial interest and beauty, adapted for microscopic observation. 3d ed. 16°. *London*, 1859.

Ward, A. F. Semaphoric color signals: designed as a universal system for all nations. 24°. *Philadelphia*, 1866.

Ward, A. W. A lecture on Charles Dickens. **Science lectures for the people, series 2.**

Ward, James. Flax; its cultivation and preparation, with practical suggestions for its improvement and best modes of conversion. 12°. *London, n. d.*

Ward, William Henry. Code of signal telegraph, for ocean marine service, alphabetically arranged, with all the principal seaport towns, lighthouses and islands in the world, with their latitudes and longitudes, including North American lake and river navigation. *Illus.* 8°. *Auburn, N. Y.*, 1858. pp. 14. 2d and 4th eds. *London*, 1861.

——— The international day, night, and fog signal telegraph. 9th ed. 8°. *Auburn, N. Y.*, 1865. Later ed., 1867.

Warder, John A. American pomology. Apples. 8°. *New York*, 1867.

Ware, John. Boston journal of philosophy and the arts. *See* **Webster**, John W.

Warhanek, Carl. Conserven: Extracte, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

Waring, George E., *jr.* Draining for profit and draining for health. 12°. *New York*, 1867.

——— The elements of agriculture, a book for farmers, with questions for the use of schools. 16°. *New York*, 1854.

——— The sanitary condition of dwelling houses in town and country. 18°. *New York*, 1877. **Van Nostrand's science series, No. 31.**

——— The sanitary drainage of houses and towns. 8°. *New York*, 1876.

Waring, J. B. The Italian court, etc., in the Crystal palace. *See* **Wyatt**, M. D. **Crystal palace library, v. 2.**

Waring, William. Rousseau's dictionary of music; transl. by. *See* **Rousseau**, Jean Jacques.

WARMING. *See, also*, **Heating**.

WARMING. *See* **Arnott**, N.

——— and ventilating public buildings. *See* **Tredgold**, Thomas.

——— buildings, and ventilation. *See* **Hood**, Charles.

——— buildings by hot water. *See* **Hood**, Charles.

——— History and art of. *See* **Bernan**, Walter.

——— Manuel du poélier-fumiste. *See* **Ardenni**, —, and **Julia de Fontenelle**, J. S. E. **66 Manuels Roret.**

——— of buildings, Treatise on the. *See* **Richardson**, C. J.

——— Der Ofenbaumeister und Feuermechanist. *See* **Matthaey**, Carl L. **51 Neuer Schauplatz der Künste.**

——— Practical observations on. *See* **Practical.**

——— Principien der Luftheizung. *See* **Wolpert**, Adolph.

——— Principles of. *See* **Tredgold**, T.

——— Remarks on. *See* **Reid**, David B.

——— The smokeless fire-place, etc. *See* **Arnott**, Neil.

——— Technologie der Wärme. *See* **Ferrini**, Rinaldo. [†] *Add.*

——— Treatise on. *See* **Tomlinson**, C. **Weale's series, Nos. 57, 58.**

——— Ventilation and, of buildings. *See* **Ruttan**, Henry.

——— Zimmeröfen und Zimmercamine. *See* **Fournel**, J. **150 Neuer Schauplatz der Künste.**

Warner, Dewitt C. The practical family dentist; a popular treatise on the teeth. 12°. *New York*, 1853.

Warner, Richard. Antiquitates culinariæ; or curious tracts relating to culinary affairs of the old English; with a preliminary discourse, notes and illustrations. 4°. *London*, 1791.

Warnes, John. The cultivation of flax: the fattening of cattle with native produce; box feeding and summer grazing. 2d ed. 8°. *London*, 1847.

Warr, G. Finden. Dynamics; construction of machinery, equilibrium of structures, and the strength of materials; being a continuation of the treatises on mechanics. *Illus.* 8°. *London*, 1851.

Warren, *Mrs.* How to furnish and adorn a house on small means. 12°. *Boston*, 1868.

Digitized by Google

Warren, Albert. The home book. *See* **Valentine,** R.

Warren, G. K. Preliminary reports of explorations in Nebraska and Dakota, in the years 1855-57. 8°. *Washington,* 1875. UNITED STATES. **War** dept. Bureau of engineers.

Warren, Henry. The home book. *See* **Valentine,** R.

Warren, J. Mason. Surgical observations, with cases and operations. 8°. *Boston,* 1867.

Warren, John C. Etherization, with surgical remarks. 12°. *Boston,* 1848.

Warren, Joseph. Country gentleman; ed. by. *See* **Country.**

Warrington, Joseph. The obstetric catechism. 8°. *Philadelphia,* 1853.

Wartmann, —. Thätigkeit der St. Gallen naturwissenschaftlichen Gesellschaft; red. v. *See* ST. GALL.

WASHERS. Abridgments English Patents, No. 58.

WASHING machines. Mémoire sur les machines à laver. *See* **Dépiere,** M. J. Société libre d'émulation, etc.

—— Manuel du blanchissage. *See* **Julia de Fontenelle,** J. S. E. **40 Manuels Roret.**

Washington, *Capt.* On the progress of naval architecture. *See* **Lectures** on the results of the exhibition.

Washington, *Gen.* George. Account with the United States from 1775 to 1783, as written by himself; a fac simile copy. The original is on file in the office of register of the United States treasury. fol. *New York,* 1857.

WASHINGTON (Arkansas). Meteorological observations, 1840–1859. By N. D. Smith. **Smiths'n contrib., v. 12.**

WASHINGTON (District of Columbia) and Alexandria steamboat co. Navy of the United States. Speech in the case of Mattingly and the W. and A. steamboat co. *See* **Dickerson,** E. N.

—— Boyd's directory. 20 v. 8°. *Washington,* 1858–78——.

—— Non-officinal formulæ in local use. Compiled and published by the joint committee of the medical and pharmaceutical associations of the District of Columbia. *See* **Medical** and pharmaceutical.

WASHINGTON (District of Columbia). Smithsonian institution, Annual report of the board of regents, and other publications of the. *See* **Smithsonian.**

Washington (The) quarterly magazine, of arts, science and literature. Robert Little, editor. *Illus.* 8°. *Washington,* 1823.

Wasson, J. D. The cultivator; edited by. *See* **Cultivator.**

WATCH, Le Roy's marine. *See* **Le Roy.**

—— making. *See, also,* **Clock** and watch making.

—— —— Clock and watchmakers' manual. *See* **Booth,** Mary L.

—— —— Handbuch für Landuhrmacher. *See* **Auch,** J. **30 Neuer Schauplatz der Künste.**

—— —— Schule des Uhrmachers. *See* **Heidner,** G.

—— repairer's handbook. *See* **Kemlo,** F.

—— springs. Art de faire les ressorts de montres. Par W. Blakey. *See* PARIS. **Acad. roy. des sc.; arts et métiers, v. 43.**

—— work, Clock and. *See* **Cumming,** Alexander.

—— —— A treatise on. *See* **Nelthropp,** H. L.

WATCHES. Abridgments English Patents, No. 9.

—— *See* PHILADELPHIA. **Internat. exhib. 1876, Group 11.**

—— Uhren. Von W. Schönberger. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

WATER, Account of hydraulic and other machines for raising. *See* **Ewbank,** Thomas.

—— and water supply. *See* **Corfield,** W. H. **Van Nostrand's science series, No. 17.**

—— Anleitung zur Untersuchung von Wasser. *See* **Kubel,** W.

—— Chemische Technologie des Wassers. *See* **Bolley,** P. Das Beleuchtungswesen, B. 1, Gr. 2.

—— closets. **Abridgments English Patents, No. 63.**

—— —— Fosses d'aisances, latrines, etc. *See* **Liger,** F.

—— cure in America. Over three hundred cases of diseases treated with water, by Wesselhoeft, Shew, Bedortha, Shieferdecker, Trall, Nichols, and others, with cases of domestic practice. Edited by a water patient. 12°. *New York,* 1851.

Digitized by Google

WATER cure manual. *See* **Shew**, Joel.
—— —— Bulwer and Forbes on the water treatment, etc. *See* **Houghton**, Roland S.
—— Curiosities of common. *See* **Smith**, John.
—— Evaporation of water in steam engines. By E. Woods. *See* **Tredgold**, T. **Steam engine, v. 1.**
—— Forms of. By John Tyndall. *See* **International scientific series, v. 1.**
—— gas and steam. (Monthly.) v. 1. 1878——. 4°. *Philadelphia*, 1878——.
—— Gesetz des strömenden Wassers. *See* **Hagen**, G.
—— in mines. Die neuen Wasserhaltungsmaschinen. *See* **Hörmann**, A.
—— mills. Die Anlage von Wassermühlen, mit besonderer Berücksichtigung der Terrain-Verhältnisse. *See* **Pohl**, J.
—— power. *See* **Glynn**, Joseph. **Weale's series, Nos. 82, 82*.**
—— —— Application of. By R. Mallet. **Weale's papers on engineering, v. 6.**
—— —— Die Benützung der Berge- und fliessenden Wässer in Nieder-Oesterreich für die Landwirthschaft und Industrie. *See* AUSTRIA.
—— proofing. **Abridgments English Patents, No. 55.**
—— supply. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 14.**
—— —— *See* **Slagg**, Charles. Sanitary work in towns and villages.
—— —— Die Albwasser-Versorgung im Königreich Württemberg. *See* WURTEMBERG.
—— —— American gas-light journal, devoted to light, water supply and sewerage. *See* **American.**
—— —— Brunnen-Ingenieur. *See* **Dumas**, J. **233 Neuer Schauplatz der Künste.**
—— —— Les eaux de Lyon et de Paris. *See* **Dumont**, Aristide.
—— —— Journal of. *See* **Journal** of gaslighting, etc.
—— —— Reports and opinions of chemists in regard to the use of lead pipe in the distribution of water for the supply of cities. *See* **Collection** of reports. [†] *Add.*
—— —— Versorgung der Städte mit Wasser. *See* **Versorgung.**
—— —— Vorarbeiten zu einer zukünftigen Wasser-Versorgung der Stadt Berlin. *See* **Veitmeyer**, L. A.
—— wheels. Leistung eines Reactionsrades. *See* **Weisbach**, J.
—— —— Musterzeichnungen von Wasserrädern. *See* HESSE-DARMSTADT.
—— —— Tests of turbine. *See* PHILADELPHIA. **Internat. exhib. 1876, Group **.**
—— —— Traité de la construction des roues hydrauliques. *See* **Laffineur**, Jules.
—— works, Treatise on. *See* **Hughes**, S. **Weale's series, No. 82 ***.**
—— —— Das Wasserwerk der Stadt Bremen. *See* **Böttcher**, Emil, and **Ohnesorge**, H. [†] *Add.*
—— —— Das Wasserwerk der Stadt Halle, erbaut in den Jahren 1867 und 1868. *See* HALLE.

Waterhouse, G. R. Physical atlas; by. *See* **Johnston**, Alexander K.

Waterston, William. A cyclopædia of commerce, mercantile law, finance, commercial geography, and navigation; containing the present tariff, and an essay on commerce, by J. R. McCulloch. New ed. 8°. *London*, 1847.
—— and **Burton**, J. H. A cyclopædia of commerce, mercantile law, finance and commercial geography. With maps. 8°. *Edinburgh*, 1843.

Waterton, Charles. Essays on natural history, chiefly ornithology: with an autobiography of the author. 1st and 2d series. 5th ed. 2 v. 18°. *London*, 1844.

Watherston, James H. A familiar explanation of the art of assaying gold and silver, and its bearing upon the interests of the public demonstrated; with considerations on the importance of the pix jury; a review of the past and present state of the goldsmiths' trade; and a table, shewing the mixture and sterling value per ounce of every quality of gold that can be alloyed. 12°. *London*, 1847.

Watin, M. Die Kunst des Staffirmalers, Vergolders, Lackirers, und Farbenfabricant. Aus dem Französischen von A. W. Hertel. 8°. *Weimar*, 1854. **207 Neuer Schauplatz der Künste.**

Watson, Barnard L. The telegraphic vocabulary, adapted for semaphoric telegraphs. 4th ed. 8°. *Hull*, [1840].

Watson, Egbert P. The modern practice of American machinists and engineers;

Digitized by Google

Watson, Egbert P.—Continued.
including the construction, application and use of drills, lathe-tools, cutters for boring cylinders, etc. 16°. *Philadelphia*, 1867.

Watson, J. Forbes. Index to the native and scientific names of Indian and other eastern economic plants and products. roy. 8°. *London*, 1868.

—— The textile manufactures and the costumes of the people of India. fol *London*, 1866.

Watson, James C. Theoretical astronomy, relating to the motions of the heavenly bodies revolving around the sun, in accordance with the law of universal gravitation. roy. 8°. *Philadelphia*, 1868.

Watson, John. The medical profession in ancient times. roy. 8°. *New York*, 1856.

Watson, John. The theory and practice of the art of weaving by hand and power, with calculations and tables. *Illus.* 8°. *Glasgow*, 1863. Also ed. 1873.

Watson, R. Chemical essays. 5 v. 12°. *Cambridge and London*, 1781–87.

Watson, Thomas. Lectures on the principles and practice of physic. New American edition. Ed. by D. Francis Condie. 8°. *Philadelphia*, 1858.

Watson, William. Report on civil engineering, public works and architecture. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 3.**

Watt, Alexander. Electro-metallurgy practically treated. 12°. *London*, 1860. **Weale's supplementary series, No. 7.**

Watt, James, Biography of. *See* **Arago,** D. F. J. Biography of scientific men.

—— The life of. *See* **Muirhead,** James P.

—— A life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 4.**

—— Mechanical inventions of. *See* **Muirhead,** J. P.

Watt, John and Charles. The chemist; ed. by. *See* **Chemist.**

Watterston, George, and **Van Zandt,** N. B. Tabular statistical views of the United States. l. 8°. *Washington*, 1829.

—— —— Same. Continuation of. 8°. 1833.

Watts, Elizabeth. Fish, and how to cook it. 18°. *London*, 1866.

—— The home book. *See* **Valentine,** R.

Watts, Elizabeth. The orchard and fruit garden; their culture and produce. 18°. *London*, 1867.

—— Poultry; an original and practical guide to their breeding, feeding and exhibiting. 18°. *London*, 1867.

—— Vegetables, and how to grow them. 18°. *London*, 1867.

Watts, Henry. Chemical technology. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

—— Elements of inorganic chemistry; ed. by. *See* **Graham,** Thomas.

—— Handbook of chemistry; transl. by. *See* **Gmelin,** L. **Cavendish society publications.**

—— Journal of the London chemical society; ed by. *See* LONDON. Chemical society.

WAX. Die Wachs-Industrie und Kunst. *See* **Schmidt,** C. H. **199 Neuer Schauplatz der Künste.**

—— chandler. Art du cirier, par H. L. Duhamel du Monceau. *See* PARIS. **Acad. des sc.; arts et métiers, v. 14, also 39.**

—— flowers: how to make them, with new methods of sheeting wax, modelling fruit, etc. 12°. *Boston*, 1864.

Wayland, Francis. The elements of intellectual philosophy. 12°. *Boston*, 1854.

Weale, John. Monograms, old architectural ornament, sacred illustrations, borders and alphabets. fol. *London*, n. d.

—— Quarterly papers on architecture; ed. and pub. by. v. 3. 4°. *London*, 1845.

—— Quarterly papers on engineering; ed. and pub. by. *Illus.* 6 v. 4°. *London*, 1844–49.

CONTENTS.

v. 1. Dredging machine.
Engines of the Russian steam frigate of war Kamschatka.
Framework of malleable iron for jeattles and breakwaters. By J. Vetch.
Improvements of the steam engine. By J. Gill.
Memoir of J. Brindley. By S. Hughes.
Memoir of W. Chapman.
Memoir of W. Jessop. By S. Hughes.
Notices of works on engineering.
Setting the widths of ground for a railway or canal. By F. W. Simms.
Utility and construction of the dredging machines.

v. 2. Application of the atmospheric system of rail ways. By R. Mallet.
Atmospheric railway. By J. Macneill.
Consumption of fuel in the locomotive engines of the Liverpool and Manchester railway, etc By E. Wood.

Digitized by Google

Weale, John—Continued.

Dredging. By Bury, Curtis and Kennedy.
Engineering in the United States.
Engineering of Holland. By H. Clarke.
Harbors of the southeastern coast. By W. M. Higgins.
Havens of safety. By J. Vetch.
Heat. By E. Péclet.
Herne Bay pier. By W. M. Higgins.
Loss by friction in beam and direct action steam engine. By W. Pole.
Memoir of S. Clegg.
Report on Holyhead and Porth Dynllaen harbors. By J. Rennie.

v. 3. American steam navigation. By J. O. Sargent.
Atmospheric railways. By Arago.
Bangor slate quarries. By S. Hughes.
Bricks and tiles in Holland. By H. Clarke.
Bridge across the Nevka.
Cross-section of roads. By J. Neville.
Heat. By E. Péclet.
Iron roof of the new houses of parliament.
Plan of harbor at Granton pier. By J. D. Boswall.
Report on the harbors of Holyhead and Porth Dynllaen. By T. Page.
Thames tunnel. By H. Law.
Wolf's steam engine.

v. 4. Application of atmospheric pressure to railways. By T. Harris.
Atmospheric railways. By R. Mallet.
Circumstances observed at Menai bridge during storms, etc. By T. Bashforth.
Construction of oblique bridges. By W. H. Barlow.
Docks, slips, etc., of the United States. By H. Clarke.
Experiments on the power of water wheels. By J. Rennie.
Harbor of Rye. By J. Morgan.
Law of French and English patents. By C. Egan.

v. 5. Arnollet's system of atmospheric railways. By R. Mallet.
Progress of machinery and manufactures in Great Britain.
Researches in hydraulics. By B. A. Peacocke.
Taunus railway. By R. Thorman.
Thames tunnel. By H. Law.
Wet dock, etc., at Sunderland. By J. Murray.

v. 6. Application of water power. By R. Mallet.
Cornish pumping engines. By W. Pole.
Foundations under water. By S. Bentham.
Improvements of Portsmouth harbor. By S. Bentham.
Improvement of the Medway, and of the fort and arsenal at Chatham. By S. Bentham.
Locomotive engines. By Gouin and Le Chatelier. Transl. by R. Lloyd.
Steam engines in naval arsenals.
Water wheels. By W. Fairbarn.

——— Rudimentary dictionary of terms used in architecture civil, architecture naval, building and construction, early and ecclesiastical art, engineering, civil engineering, mechanical, fine art, mining, surveying, etc. 12°. *London*, 1849–50. **Weale's series, v. 36–39.**

——— Weale's rudimentary series. Nos. 1–197. 12°. *London*, 1849–75———.

No. 1. Chemistry; with appendix on agricultural chemistry. By Fownes. 4th ed.
2. Natural philosophy. By C. Tomlinson. 3d ed. 1853.
2*. Cottage building. By C. B. Allen.
3. Geology. By J. E. Portlock 3d ed. 1853.
4, 5. Mineralogy. By D. Varley. 2 v. 1849.
4*. Mineralogy. By A. Ramsey, jr.
4**. Foundations and concrete works. By E. Dobson.
6. Mechanics. By C. Tomlinson.
7. Electricity. By W. S. Harris. 3d. ed. 1853.
7*. Galvanism, animal and voltaic electricity By W. S. Harris.
8–10. Magnetism. By W. S. Harris. Rev. by H. M. Noad. 3 v. *Illus.*
11. History of electric telegraph. By R. Sabine
11*. History of electric telegraph. By E. Highton.
12. Pneumatics. By C. Tomlinson.
13–15, 15*. Civil engineering. By H. Law and G. R. Burnell. 3 v. and supplement. 5th ed. 1852.
16. Orders of architecture. 2d ed. By W. H. Leeds.
17. Styles of architecture. By T. T. Bury *Illus.* 2d. ed. 1850.
18, 19. Designs in architecture. By E. L. Garbett. 2 v. 1850.
20, 21. Perspective. By G. Pyne. 2 v. 3d ed. 1851.
22. Art of building. By E. Dobson. 1849.
23, 24. Brick and tile making. By E. Dobson. 2 v. 1850.
25, 26. Masonry and stone cutting; with appendix on the preservation of stone. By E. Dobson. 1849.
27, 28. Painting; a grammar of coloring. By G. Field. 1850.
29. Draining districts and lands. By G. D. Dempsey. 1849.
30. Drainage and sewage of towns. By G. D. Dempsey. 1849.
31. Well-digging, boring and pump work. By J. G. Swindell. 2d ed. Rev. by G. R. Burnell. 1850.
32. Use of instruments. By J. F. Heather. 3d ed. 1851.
33. Cranes and machinery for raising heavy bodies. By J. Glynn. 1849.
34. Steam engine. By D. Lardner.
35. Blasting rocks and quarrying. By J. Burgoyne. 2d ed. 1849.
36–39. Dictionary of terms of art, surveying, engineering, etc. By J. Weale. Rev. by R. Hunt. 1849–50.

Digitized by Google

Weale, John—Continued.

No. 40. Art of glass staining. By M. A. Gessert. 1851.
41. Painting on glass from the German. By E. O. Fromberg. 1851.
42. Cottage building.
43. Tubular and girder bridges. By G. D. Dempsey. 1850.
44. Foundations and concrete works. By E. Dobson. 1850.
45. Limes, cements, mortars, etc. By G. R. Burnell. 1850.
46. Constructing and repairing roads. By H. Law. 1850.
47–49. Construction and illumination of lighthouses. By A. Stevenson. 1850.
50. Law of contracts. By D. Gibbons. 1849.
51–53. Naval architecture. By J. Peake.
53*. Construction of ships for ocean and river service. By H. A. Sommerfeldt.
53**. Atlas of plates to above. By H. A. Sommerfeldt.
54. Masting, mastmaking, etc. By R. Kipping. 1853.
54*. Iron ship building; with supplement. By J. Grantham. 5th ed. 1858.
55, 56. Navigation: the sailor's sea-book. By J. Greenwood. 1850.
57, 58. Warming and ventilation. By C. Tomlinson. 1850.
59. Steam boilers. By R. Armstrong. 1850.
60, 61. Land and engineering surveying.
62. Railway construction, Sketches of. By M. Stephenson. With additions, by E. Nugent. 1850.
62*. Railway capital and dividends. By E. D. Chattaway.
63–65. Agricultural buildings, etc. By G. H. Andrews. 1852–53.
66. Clay lands and loamy soils. By J. Donaldson. 1852.
67, 68. Clocks, watches and bells. By E. B. Denison. 1850.
69, 70. Music. By C. C. Spencer.
71. Instructions for playing piano-forte. By C. C. Spencer. 1853.
72–75. Recent fossil shells. By S. P. Woodward. *Illus.*
76, 77. Descriptive geometry. By J. F. Heather. 1851.
77*. Economy of fuel. By T. S. Prideaux. 1853.
78, 79. Steam and locomotion. By J. Sewell.
78*. The locomotive engine. By G. D. Dempsey.
79*. Atlas of plates to above. By G. D. Dempsey.
79**. Photography, the stereoscope, etc., from the French of D. Van Monckhoven. By W. H. Thornthwaite. 1863.
79***. Photography. By G. C. H. Halleur.
80, 81. Marine engines and steam vessels. By R. Murray. 1852.
80*, 81*. Embanking lands from the sea. By J. Wiggins. 1852.
82, 82*. Power of water as applied to mills. By J. Glynn. 1852.

Weale, John—Continued.

No. 82***. Waterworks. By S. Hughes. 1851.
83. Bookkeeping. 2d ed. By J. Haddon. 1854.
82**, 83*. Gas works. By S. Hughes. 1853.
83**. Construction of locks. By C. Tomlinson. 1853.
83** *bis*. Construction of locks. By A. C. Hobbs. *Illus.*
83 *bis*. Form of ships and boats. By W. Bland. 1852.
84. Arithmetic. By J. R. Young. 2d ed. 1854.
84*. Key to the above. By J. R. Young. 1853.
85. Equational arithmetic. By W. Hipsley. 1852.
85*. Supplement to the above. By W. Hipsley
86. Algebra. By J. Haddon.
86*. Key and companion to the above. By J. R. Young.
87. Elements of algebra for the use of schools, etc. By J. Haddon.
88, 89. Elements of geometry. By H. Law. 1853.
90. Analytical geometry and conic sections. By J. Hann. 1850.
91, 92. Trigonometry, plane and spherical. By J. Hann. 1849–54.
93. Mensuration. By T. Baker. 1850.
94, 95. Logarithms and mathematical tables. By H. Law. 1851.
96. Popular astronomy. By R. Main.
97. Statics and dynamics. By T. Baker.
98, 98*. Mechanism, and practical construction of machines. By T. Baker and Nasmyth. 1852.
99, 100. Navigation and nautical astronomy. By J. R. Young.
100*. Navigation tables to the above. By J. R. Young.
101. Differential calculus. By W. S. B. Woolhouse. 1854.
101*. Weights, measures and moneys of all nations. By W. S. B. Woolhouse.
102. Rudiments of integral calculus. By H. Cox.
103. Examples of integral calculus. By J. Hann.
104. Examples of differential calculus. By W. S. B. Woolhouse.
105. Algebra, geometry and trigonometry. By T. P. Kirkman.
106. Ships' anchors for all services. By G. Cotsell.
107. The county court guide.
108. Metropolis local management amendment act, 1862. Notes and index.
109. Nuisances removal and diseases prevention amendment act.
110. Recent legislative acts, applying to contractors, merchants and tradesmen.
111. Arches, piers and buttresses. By W. Bland.
112. Domestic medicine. By Gooding.
112*. Management of health. By J. Baird.
113. Use of field artillery on service. By Tanbert. Transl. by H. H. Maxwell.

Digitized by Google

Weale, John—Continued.

No. 113*. Memoir on swords. By Marey. Transl. by H. H. Maxwell.
114. Machinery; construction and working. By C. D. Abel.
115. Plates to the above. By C. D. Abel.
116 Acoustics of public buildings. By T. R. Smith.
117. Subterraneous surveying, and the magnetic variations of the needle. By T. Fenwick. Additions, by T. Baker.
118, 119. Civil engineering of North America. By D. Stevenson.
120. Hydraulic engineering. By G. R. Burnell. 1858.
121, 122. Rivers and torrents, navigable canals, etc. From the Italian of Paul Frisi. 1861.
123. Carpentry and joinery, founded on Robison and Tredgold.
123*. Illustrative plates to the above.
124. Roofs for public and private buildings, founded on Robison, Price and Tredgold.
124*. Plates of recent iron roofs. By Robison, Price and Tredgold.
125. Combustion of coal, and the prevention of smoke. By C. W. Williams.
126.
127. Architectural modelling in paper. By T. A. Richardson.
128. Vitruvius's architecture. Plates. By J. Gwilt.
129–130. Grecian architectural principles of beauty. By the Earl of Aberdeen.
131. Ready-reckoner for millers, farmers, etc.
132. Erection of dwelling houses, etc. By S. H. Brooks. *Illus.*
133. Metallurgy of copper. By R. H. Lamborn.
134. Metallurgy of silver and lead. By R. H. Lamborn.
135. Electro-metallurgy. By A. Watt.
136. Rudimentary arithmetic. By J. Haddon. Ed. by A. Arman.
137. Key to the above. By A. Arman.
138. Handbook of the telegraph. By R. Bond.
139. Steam engine. By T. Baker.
140 Soils, manures and crops. By R. S. Burn.
141. Farming and farming economy. By R. S. Burn.
142. Cattle, sheep and horses. By R. S. Burn.
143. Essays on camphor and dew. By C. Tomlinson.
144. Outlines of modern farming. By R. S. Burn.
145. Management of dairy, pigs, poultry, etc. Notes on the diseases of stock. By R. S. Burn.
146. Utilisation of town sewage; irrigation, reclamation of waste land. By R. S. Burn.
146*. Culture of fruit trees. By De Breuil.
147. Stepping stone to arithmetic. By A. Arman.
148. Key to the above.
149. Sails and sail making. By R. Kipping.
150. Logic pure and applied. By S. H. Emmens.
151. Law of friendly, provident, building, and loan societies. By N. White.

Weale, John—Continued.

No. 152. Practical hints for investing money. By F. Playford.
153. Selections from Locke on the conduct of the human understanding. By S. H. Emmens.
154. General hints to emigrants.
155. Engineer's guide to royal and mercantile navies; by a practical engineer. Rev. by D. F. McCarthy.
156. Quantities and measurements. By Beaton.
157. Emigrant's guide to Natal. By R. J. Mann.
158. Slide rule and how to use it.
159. Emigrant's guide to new South Wales, Australia, Victoria and Queensland. By J. Baird.
160. Emigrant's guide to Tasmania and New Zealand. By J. Baird.
161. Questions on magnetism, electricity and telegraphy. By W. McGregor.
162. Brass founder's manual. By W. Graham.
163. Law of patents for inventions. By F. W. Campin.
164. Modern workshop practice. By J. G. Winton.
165. Iron and heat. By J. Armour.
166. Power in motion. By J. Armour.
167. Construction of iron bridges, girders, roofs, etc. By F. Campin. *Illus.*
168. Drawing and measuring instruments. By J. F. Heather.
169. Optical instruments; telescopes, microscopes, etc. By J. F. Heather.
170. Surveying and astronomical instruments. By J. F. Heather.
171. Workman's manual of engineering drawing. *Illus.* By J. Maxton.
172. Mining tools. By W. Morgans.
172*. Atlas of plates to above.
173. Physical geology (based partly on Portlock's Rudiments of geology). By R. Tate.
174. Historical geography (based on the same). By R. Tate.
175. Builders and contractors' price book. By G. R. Burnell.
176. Outlines of the history of the metallurgy of iron, of iron manufactures, methods of assay, etc. By H. Bauerman.
177. Culture of fruit trees. By Du Breuil.
178. Practical plane geometry. By J. F. Heather.
179. Projection, orthographic, topographic, and perspective. By J. F. Heather.
180. Coal and coal mining. By W. W. Smyth.
181. Painting (fine art). By Gullick and Timbs.
182. Carpentry and joinery. By Tredgold and Tarn.
183*. Atlas of 35 plates to the above.
183, 184. Animal physics. Parts 1 and 2, in 1 v. By Dr. Lardner.
185. The complete measurer. (Timber, stone, etc.) By Richard Horton.

Digitized by Google

Weale, John—Continued.

No. 186. Grammar of colouring. By Field. Enlarged by Ellis A. Davidson, with coloured plates.

187. Hints to young architects. By G. Wightwick. New edition, enlarged by G. H. Guillaume.

188. House-painting, graining, marbling, and sign-writing. With 9 coloured plates and 150 woodcuts. By Ellis A. Davidson.

189. Practical bricklaying. By Adam Hammond.

190. Steam and the steam engine, stationary and portable. By D. K. Clark, C. E. Partly based upon Sewell.

191. Plumbing, etc. By W. P. Buchan.

192. Timber importer's and builder's standard guide. By R. E. Grandy.

193. Hand book of field fortification. By Major W. W. Knollys.

194. House manager (The), etc. By an old housekeeper.

195. The mineral surveyor and valuer's complete guide. By William Lintern.

196. Theory of compound interest and annuities. With tables of logarithms. By Fédor Thoman.

197. Roads and streets (The construction of). By H. Law, C. E., and D. Kinnear Clark.

——— Steam navigation; ed. by. *See* **Tredgold**, T.

——— Theory, practice and architecture of bridges of stone, iron, timber, and wire; with examples on the principles of suspension. Description of the plates and general index. [The different papers are separately paged.] *Illus.* 2 v. 8°. *London*, 1843.

CONTENTS.

v. 1. Account of Hutcheson bridge, Glasgow. By L. Hill.
Papers on foundations. By T. Hughes.
Principles of construction. Transl. from Gauthey.
Theory of bridges. By J. Mann.
Theory of the arch, etc. By H. Moseley.
Supplement. Mathematical principles of Dredge's suspension bridges. By J. Dredge.
v. 2. Theory and architecture of bridges. By W. Hosking.
Supplement. Specification of Chester Dee bridge; timber bridges, etc., on the Utica and Syracuse railroad. By F. B. Isherwood.

WEALTH. *See, also*, **Political** economy.

——— and industry of the United States. *See* UNITED STATES. **Interior** department. Census.

——— The mine of. *See* **Fitzgibbon**, William.

——— The science of. *See* **Walker**, Amasa.

WEAPONS. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 16.**

——— **Abridgments English Patents, No. 10.**

——— Waffen mit Ausnahme der Kriegswaffen. Von Joh. Newald. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

WEATHER. *See, also*, **Meteorology.**

——— casts, A manual of. *See* **Steinmetz**, Andrew.

——— An essay on weather and its varieties. *See* **Hopkins**, Thomas.

——— guide, A complete. *See* **Taylor**, Joseph.

——— Manual of, for 1830. *See* **Mackenzie**, George.

——— reports. Daily bulletin. *See* UNITED STATES. **War dept. Signal office.**

Weatherley, Henry. Treatise on the art of boiling sugar, crystallizing, lozenge-making, comfits, gum goods, and other processes for confectionery, etc. 12°. *Philadelphia*, 1865.

Weaver, J. A system of practical elocution and rhetorical gesture, comprising all the elements of vocal delivery both as a science and as an art. 12°. *Philadelphia*, 1846.

WEAVING. **Abridgments English Patents, No. 20.**

——— Art of. *See* **Gilroy**, C. G.

——— Art of. *See* **Murphy**, John.

——— Art of. *See* **Watson**, John.

——— The art of weaving among the ancients. *See* **Yates**, James.

——— Atlas für mechanische Technologie: Weberei. *See* **Kronauer**, J. H.

——— Berechnung der zur Darstellung eines Gewebes erforderlichen Garnmenge. *See* **Weigert**, S.

——— Fancy. The art of designing fancy cotton and woolen cloths. *See* **Ashton**, F. T.

——— Das Ganze der Weberei. *See* **Stommel**, Cuno.

——— Handbuch der Webekunst. *See* **Gilroy**, Clinton G., **Falcot** P., and **White**, George. **157 Neuer Schauplatz der Künste.**

——— in all its branches. *See* **Hecht**, Abslam.

——— machines. Webereimaschinen. Von Johann Zemann. *See* VIENNA. **Gen.-**

Digitized by Google

WEAVING—Continued.

Dir. der Weltausst. 1873. Bericht. Gruppe 13.

——— Die mechanische Weberei. *See* **Voigt, F. H. 257 Neuer Schaupiatz der Künste.**

——— Die Technologie der Wirkerei. *See* **Willkomm,** Gustav.

——— The theory and practice of the art of. *See* **Watson,** John.

——— Treatise on. *See* **White,** George.

——— Unterrichtsblätter für Weberei. *See* **Kafka,** Ig.

Webb, E. R., Supplementary specimens of wood type, manufactured by. 4°. *New York, n. d.*

Webb, T. W. Celestial objects for common telescopes. 2d ed. 12°. *London,* 1868.

Weber, *Dr.* Das Braunheu: seine verschiedenen Darstellungen und sein Futterwerth. 8°. *Berlin,* 1856.

Weber, C. O. Verhandlungen des naturhistorischen Vereins. *See* **Prussian** Rhenish provinces.

Weber, E. Jahresbericht des Mannheimer Vereins für Naturkunde; erstattet v. *See* MANNHEIM.

Weber, Godfrey. Theory of musical composition. Transl. from 3d German edition, with notes. By James F. Warner. 2 v. roy. 8°. *Boston,* 1846.

Weber, Hermann. Der Bau der Locomobilen und transportablen Dampfmaschinen. 8°. *Leipzig,* 1871.

Weber, J. W. J. Das Schulter-Mass-System zum Zuschneiden für Herren-Kleider. Enthaltend einen mathematischen Ruler mit verschiedenen Abtheilungen. *Illus.* 8°. *New York,* 1846. pp. 7.

Weber, M. M. von. Die Praxis des Baues und Betriebes der Secundärbahnen mit normaler und schmaler Spur, welche Personen und Güterverkehr führen. 8°. *Weimar,* 1873.

——— Das Telegraphen- und Signalwesen der Eisenbahnen. *Illus.* 8°. *Weimar,* 1867.

Weber, Martin. Schleifen, Poliren, Färben, und Verzieren des Marmors und anderer Steinarten zu Monumenten, Säulen, Statuen. Darstellung des Stucco lustro, des Gyps und andern künstlichen Marmors. 8°. *Weimar,* 1863.

Webster, Daniel, Life of. *See* **Curtis,** George Ticknor.

Webster, John W. A manual of chemistry; containing the principal facts of the science. 3d ed. 8°. *Boston,* 1839.

——— **Ware,** John, and **Treadwell,** Daniel. The Boston journal of philosophy and the arts; exhibiting a view of the progress of discovery in natural philosophy, mechanics, chemistry, geology, and mineralogy; natural history, comparative anatomy, and physiology; geography, statistics, and the fine and useful arts. v. 1-3, 1823-26. 8°. *Boston,* 1824-26.

Webster, Noah. An American dictionary of the English language; to which is prefixed a dissertation on the origin, history and connection of the languages of Western Asia and Europe, with an explanation of the principles on which languages are formed. Revised by Chauncey A. Goodrich; with pronouncing vocabularies of Scripture, classical and geographical names [by N. Porter, and a memoir of the author]. 4°. *Springfield, Mass.,* 1854. Also, eds. 1864, 1866, 1873.

——— A dictionary of the English language abridged from the American dictionary; with Walker's key to the pronunciation of Greek, Latin and Scripture proper names. sm. 4°. *New York,* 1856.

——— Same. Academic edition. 8°. *New York,* 1868.

——— Same. Counting house edition. 8°. *New York,* 1869.

Webster, Thomas. Amendment of the law and practice of letters patent for inventions. 2d ed. 8°. *London,* 1852. pp. 42.

——— Elements of science and art; ed. by. *See* **Imison,** J.

——— Encyclopædia of domestic economy; comprising such subjects as are most immediately connected with housekeeping. Assisted by Mrs. Parkes. From the last London edition; with notes, by D. Meredith Reese. *Illus.* 8°. *New York,* 1845. New ed., 1852.

——— The law and practice of letters patent for invention, statutes, practical forms, and digests of reported cases. 8°. *London,* 1841.

——— The new patent law; its history, objects, and provisions: the protection of

Digitized by Google

Webster, Thomas—Continued.
invention acts, 14 Vict. c. 8 and 15 Vict. c. 6; and the patent law amendment acts, 15 and 16 Vict. c. 83; 16 Vict. c. 5; and 16 and 17 Vict. c. 115; the rules of the commissioners of patents, as revised to January, 1854, and practical forms and proceedings. 4th ed. 12°. *London*, 1854.
——— Property in designs and inventions, in the arts and manufactures. 8°. *London*, 1853.
——— Reports and notes of cases on letters patent for inventions. 8°. *London*, 1844.
——— Subject-matter of letters patent for inventions. 8°. *London*, 1841. pp. 43. 3d ed. 1851.

Webster, William. Course of practical mathematicks; transl. from the French by. *See* **Hoste,** P.

Webster, William. The ladies' garden companion; cultivation of hardy bulbs, tuberous rooted flowers, and house plants. v. 1. 18°. *Rochester, N. Y.*, 1868.

Weckerus, Joan. Jacobus. De secretis, libri 17. Ex variis authoribus collecti, methodiceque digesti et aucti. 12°. *Basileæ*, 1613.

Weckherlin, A. von. Die landwirthschaftliche Thierproduktion. 1ster Theil, oder allgemeiner Theil. 2ter. Rinderzucht. 3ter. Schafzucht. 3te Ausgabe. 8°. *Stuttgart*, 1846–57.
——— Ueber englische Landwirthschaft. 8°. *Stuttgart und Tübingen*, 1852.

Wedding, Hermann. Die Bessemeranlage auf der Vulcan-Hütte zu St. Louis am Missisippi [sic]. Hierzu Tafel 8 bis 12. Separat-Abdruck aus den Verhandlungen des Vereins zur Beförderung des Gewerbfleisses, 1877. 8°. *Berlin*, 1877. pp. 6.
——— Grundriss der Eisenhüttenkunde. 8°. *Berlin*, 1871.
——— Percy's Handbuch der Eisenhüttenkunde; bearb. von. *See* **Percy,** John.

Wedekind, Ludwig. Studien im binären Werthgebiet. 8°. *Carlsruhe*, 1876.

Wedgwood, Hensleigh. A dictionary of English etymology. 4 v. 8°. *London*, 1859–65.

Wedgwood, Josiah. Reprint of a description of the Portland vase, formerly the Barberini; the manner of its formation, and the various opinions hitherto advanced on the subjects of the bas reliefs; with the addition of notes, by Thomas Windus, in juxtaposition to the most favored theories, with his contrary opinions thereon. *Illus.* 4°. *London*, 1845.

Wedgwood, Josiah, Life of. *See* **Meteyard,** Eliza.
——— The Wedgwoods; being a life of. *See* **Jewitt,** Llewellynn.

Wedlake, Mary, **and co.** Price-current list of modern improvements in agricultural machinery and farming operations. 8°. *London*, 1853. pp. 40.

Weekly trade circular, Publishers and stationers'. *See* **Publishers'.**

Weidmann, J. Bronze- und Ledergallanterei. Taschnerwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 10.**

Weigert, S. Ueber die Berechnung der zur Darstellung eines Gewebes erforderlichen Garnmenge, nebst Tabellen zur Ermittelung der Kett- und Schussgarne in Geweben. 4°. *Berlin*, 1845.

WEIGHING. Abridgments English Patents, No. 31.
——— and measuring, The science of. *See* **Chisholm,** H. W. [†] *Add.*
——— oats, Decimal calculations for. *See* Merritt, W. K., and co.

WEIGHTS and measures. *See* **Noble,** W. H. **Useful** tables.
——— and measures according to the decimal system. *See* **Craig,** Benjamin F.
——— and measures. An attempt towards invariable measures of length, etc. *See* **Whitehurst,** J.
——— and measures. Indstilling fra den Commission angaaende Lovgivningen om Maal og Vaegt. *See* NORWAY.
——— and measures. Manuel des poids et mesures. *See* **Daléchamps,** L.
——— and measures. Manuel des poids et mesures. Rev. et cor. par. Tarbé des Sablons. *See* **Manuel** pratique, etc. **109 Manuels Roret.**
——— and measures. Le mètre international définitif. *See* **Fonville,** Wilfried de.
——— and measures. Metric manual for schools. *See* **Sawyer,** Henry E. [*Add.*]
——— and measures, Metric system of. *See* **Putnam,** J. Pickering. [*Add.*]
——— and measures. Metrical decimal system, etc. *See* **Vattemare,** Alexander.

Digitized by Google

WEIGHTS and measures. Metrical pocket-book. *See* **Dalmon**, H. [*Add.*]

——— and measures. Nouveau manuel complet des poids et mesures. *See* **Tarbé**, M.

——— and measures of all countries, Definition of. *See* **Simmonds**, P. L. Dictionary of trade products.

——— and measures of all nations. *See* **Woolhouse**, W. S. B.

——— and measures. Rapport des nouveaux poids et mesures; avec ceux de tous les pays. *See* **Soulet d'Uzerche.**

——— and measures, Report upon. *See* **Adams**, John Quincy.

——— and measures, Uniform discount systems of. Origin of international association. *See* **Yates**, James.

——— and measures, Universal dictionary of. *See* **Alexander**, J. H.

——— and measures. Vaegtsammenligninger af kilogrammer, etc. *See* **Broch**, O. J. [*Add.*]

——— measures and coins, Report on. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 1.**

——— measures and money of all nations. *See* **Clarke**, F. W.

WEIHENSTEPHAN. Kgl. landwirthschaftliche Centralschule. Jahresbericht, pro 1858–1862. 3 Bde. *Freysung*, 1859–62.

WEIMAR-EISENACH. Landwirthschaftlicher Verein. Erster und zweiter Bericht. 8°. *Jena*, 1858 and 1861.

Weingartshofer, M. Der praktische Fotograf. 2te Aufl. 8°. *Wien*, 1856.

Weinhold, Adolf F. Introduction to experimental physics, theoretical and practical. With directions for constructing physical apparatus and for making experiments. Transl. by B. Loewy; preface by G. C. Foster. 8°. *London*, 1875.

Weinholz, W. Vollständiges theoretisch-praktisches Handbuch der Mühlenbaukunst und der Mehlfabrication; bearbeitet von. 2te Aufl. nach des Verfassers Tode hrsg. von F. W. Barfuss. 3te grösstentheils umgearbeitete und sehr vermehrte Aufl. von Carl Hartmann. 3 Bde. *Illus.* **57, 58 Neuer Schauplatz der Künste.**

Weinholz, Wilhelm. Handbuch der Papier-Fabrikation; übers. v. *See* **Le Normand**, L. S. **73, 74 Neuer Schauplatz der Künste.**

Weinland, D. F. Human cestoides; an essay on the tapeworms of man; an account of their nature, organization and embryonic development. 8°. *Cambridge*, 1858.

Weinlig, A. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse**, J. A.

——— Polytechnisches Centralblatt; hrsg. von. *See* **Polytechnisches.**

Weinlig, E. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse**, J. A.

Weintz, M. Das Fleischer- und Wurstlergeschäft; nebst Angabe der dazu erforderlichen Maschinen und Einrichtungen. *Illus.* 8°. *Weimar*, 1846. **149 Neuer Schauplatz der Künste.**

Weinwurm, —. Musikalische Lehrmittel, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Weisbach, Julius. Allgemeine Maschinen-Encyclopädie. *See* **Hülsse**, J. A.

——— Anleitung zum axonometrischen Zeichnen nebst einem Anhange für diejenigen welche weder mit der Trigonometrie noch mit der Analysis bekannt sind. Ergänzter Separatabdruck aus dem Civilingenieur. B. 2–3. *Illus.* 8°. *Freiberg*, 1857.

——— Civilingenieur; hrsg. von. *See* **Civilingenieur.**

——— Die Experimental-Hydraulik; eine Anleitung zur Ausführung hydraulischer Versuche im Kleinen, nebst Beschreibung der hierzu nöthigen Apparate, und Entwickelung der wichtigsten Grundformeln der Hydraulik, so wie Vergleichung der durch diese Apparate gefundenen Versuchsresultate mit der Theorie und mit den Erfahrungen im Grossen. Bearbeitet von. *Illus.* 8°. *Freiberg*, 1855.

——— Handbuch der Bergmaschinen-Mechanik. Zum Gebrauche für Berg- und Hütten-Leute, Maschinisten u. s. w. Bearbeitet von. B. 1ster. Grundlehren der allgemeinen Mechanik. B. 2ter. Mathematische Maschinenlehre. *Illus.* 8°. *Leipzig*, 1835–36.

——— Lehrbuch der Ingenieur- und Maschinen-Mechanik; bearbeitet von. *Illus.* 4 Bde. 8°. *Braunschweig*, 1845–60.

——— A manual of the mechanics of engineering and of the construction of machines, etc., with an introduction to the calculus. 3 v. v. 1. Theoretical mechanics; transl. from the 4th German ed. by Eckley B. Coxe. v. 2. Application of me-

Digitized by Google

Weisbach, Julius—Continued.
chanics to machines. Sect. 2. Hydraulics and hydraulic motors; transl. from 4th German ed. by A. Jay Du Bois. v. 1-2. 8°. *New York*, 1870-78.

——— Principles of the mechanics of machinery and engineering. *Illus.* 2 v. 8°. *London*, 1847-48. **Library of illustrated standard scientific works, v. 2 and 5.**

——— Same. 3d Amer. ed. *Philadelphia*, 1848.

——— Versuche über die Leistung eines einfachen Reactionsrades, an einem grösseren Modelle angestellt. *Illus.* 8°. *Freiberg*, 1851. pp. 32.

Weise, Joh. Christoph Gottlob. Die Kunst der Erleuchtung; bearb. v. *See* **Péclet,** J. C. E. **40 Neuer Schauplatz der Künste.**

Weishaupt, Th. Untersuchungen über die Tragfähigkeit verschiedener Eisenbahnschienen angestellt im Sommer 1851, auf Veranlassung des königlichen Ministeriums für Handel, Gewerbe und öffentliche Arbeiten unter Leitung von. *Illus.* fol. *Berlin*, 1852. pp. 40.

Weiss, Johann Baptist. Atlas österreichischer Werkzeuge für Holzarbeiter, ferner Werkzeuge für Buchbinder, Riemer, Glaser und Dilettanten. Zusammengestellt und hrsg. von. *Illus.* fol. *Wien*, 1861.

Weiss, Theodor. Atlas der mechanischen Technik. *See* **Hartig,** Ernst, and **Weiss,** Th. *Add.*

Weissenborn, G. American engineering: embracing mechanical art; stationary, marine, river boat, screw propeller, locomotive, pumping, and steam fire engines; rolling and sugar mills; tools, and iron bridges. *Illus.* 4°. *New York*, 1861.

Welch, Edward J. Cowling. Designing valve gearing. 18°. *London*, 1875.

Welcker, Hermann. Ueber Aufbewahrung mikroskopischer Objecte, nebst Mittheilungen über das Mikroskop. *Illus.* 8°. *Giessen*, 1856. pp. 44.

——— Ueber Irradiation und einige andere Erscheinungen des Sehens. *Giessen*, 1852.

Welcker von Goutershausen, Heinrich. Der Clavierbau in seiner Theorie, Technik und Geschichte, unter Hinweisung seiner Beziehungen zu den Gesetzen der Akustik. *Illus.* 8°. *Frankfurt am Main*, 1864.

Welcker von Goutershausen, Heinrich. Der Flügel oder die Beschaffenheit des Piano's in allen Formen. *Illus.* 4°. *Frankfurt am Main*, 1853.

——— Neu eröffnetes Magazin musikalischer Tonwerkzeuge, dargestellt in technischen Zeichnungen aller Saiten-, Blas-, Schlag- und Friktions-Instrumente; unter Aufnahme der neuesten Verbesserungen und darauf bezüglichen statistischen Notizen, nebst geschichtlicher Uebersicht der Musik und Instrumente vom ersten Ursprung bis in die Jetzt-Zeit, mit specieller Beschreibung ihres Baues, Tonumfangs und fasslicher Angabe ihrer Behandlung und Erhaltung. *Illus.* 8°. *Frankfurt am Main*, 1855.

Weld, Charles Richard. A history of the Royal society, with memoirs of the presidents. 2 v. 8°. *London*, 1848.

WELL-digging, Treatise on. *See* **Swindell,** J. G. **Weale's series, No. 31.**

Wells, David A. Annual of scientific discovery: or, year book of facts in science and arts; exhibiting the most important discoveries and improvements; with notes on the progress of science; a list of recent scientific publications; obituaries of eminent scientific men, etc. Ed. by. 21 v, 1850-71. [From 1866-69, ed. by Samuel Kneeland; 1870, by John Trowbridge, Samuel Kneeland, and W. R. Nichols; 1871, by J. Trowbridge, W. R. Nichols, and C. R. Cross.] 8°. *Boston*, 1850-71.

——— Commission for revision of revenue system. *See* UNITED STATES. **Treasury dept.** Revenue system.

——— Principles and applications of chemistry. 8°. *New York*, 1858.

——— The science of common things; explanation of physical science. 12°. *New York*, 1857.

Wells' lawyer and bookkeeping, explaining the method of keeping accounts, and containing the new constitution of the State of New York, and forms, etc. 12°. *New York*, 1847.

Wells, El'za, adm. of H. A. Wells, Decision on the application of, for an extension of patent. *See* **Thomas,** P. F.

Wells, Harvey. Systematized method of reading columns of figures; with new system of multiplication. 24°. *Wilkesville, O.*, 1870. pp. 24.

Digitized by Google

Wells, Walter. The water power of Maine. 8°. *Augusta*, 1869.

Wells, William Charles. Two essays: one upon single vision with two eyes; the other on dew. 8°. *London*, 1818.

WELLS, Sinking and boring. *See* **Spon,** Ernest. [*Add.*]

Welsford, Henry. Mithridates minor; or an essay on language. 8°. *London*, 1848.

Welsh. Terrestrial magnetism, by E. Sabine; assisted by. *See* **Herschel,** J. F. W. Manual of scientific enquiry.

Welsh, Louis G. A practical guide to business; a handbook for the American farmer, merchant, mechanic, investor, and all concerned in earning or saving money. 8°. *Philadelphia*, 1872.

Weuceliides, Franz. Hilfsmaschinen und Werkzeuge. *See* PHILADELPHIA, etc. **Bericht Oester. Weltausst. 1876, Heft 12.**

Wendell, E. A. The American poultry guide, containing a full description of all pure bred poultry; the best fowls for laying, for hatching; the best for market, and the best game for the pit. 24°. *Albany*, 1866.

Wenderoth, F. A. Instantaneous photographic process for the solar camera. 32°. *New York*, 1858. pp. 15.

Wendt, A. Die neuesten Fortschritte in der Brauerei, etc. 8°. *Leipzig*, 1863.

Wenzel, Franz. Die Einrichtungen der Viehmärkte und Schlachthäuser in den Hauptstädten Europa's. 8°. *Wien*, 1874.

Werner, A. G. Nomenclature of colours; with additions to render it useful to the arts and sciences, by Patrick Syme. 12°. *Edinburgh*, 1814.

Werther, Gustav. *See* **Journal** für praktische Chemie.

Wertheim, G. Die mechanischen Eigenschaften des Holzes. *See* **Chevandier,** E., and **Wertheim,** G. [†] [*Add.*]

West, E. Elements of physics; transl. by. *See* **Peschel,** C. F.

West, Tuffen. Half hours with the microscope: a guide to the use of the microscope as a means of amusement and instruction. *Illus.* 16°. *London, n. d.*

WEST INDIES, Importance of British and French islands in the. *See* **Candid** considerations on the sugar-trade.

—— Laws of patent privileges in the Dutch. *See* **Loosey,** C. F. [†]

WEST POINT. Guide to the United States military academy. *Illus.* 24°. *New-York*, 1867. [†]

—— History of. *See* **Boynton,** Edward C.

—— United States military academy. Biographical register. *See* **Cullum,** George W.

WEST VIRGINIA, The farms and forests, mines and oil wells of. *See* **Dodge,** J. R.

Westcott, Amos. American journal of dental science; ed. by. *See* **American.**

Westcott, Thompson. Life of John Fitch, the inventor of the steam boat. 8°. *Philadelphia*, 1857.

Westermann (B.) and co., Complete catalogue of books, maps, etc., published in Germany; republ. by. *See* **Hinrichs,** J. C.

WESTERN states and territories, All the. *See* **Barber,** John W., and **Howe,** Henry.

Westervelt, G. Family guide, or treatise on the uses and advantages of the medicated vapor bath, etc. 12°. *New Bedford*, 1857.

Westmacott, Richard. Hand book of sculpture, ancient and modern. 8°. *Edinburgh*, 1864.

Westman, Habakkuk O. [*pseud.?*] The spoon: being a part of the transactions of literary and scientific chiffonniers; illustrating the primitive arts in domestic life. 8°. *London*, 1845.

Westminster (The) review. Am. ed. v. 53–107, 1850–77. [2 v., or a year, bound in 1 v. from 1852.] 8°. *New York*, 1850–77——.

Westover, —. The Westover mss. *See* **Byrd,** W. **Farmer's register, v. 9.**

WESTPHALIA. Verhandlungen des naturhistorischen Vereins Westphalens. *See* **Prussian** Rhenish provinces.

Westropp, Hodder M. A manual of precious stones and antique gems. *Illus.* 8°. *London*, 1874.

—— Pre-historic phases; or introductory essays on pre-historic archæology. 8°. *London*, 1872.

Westwood, John O. An introduction to the modern classification of insects. [Appended to v. 2 is a Synopsis of the genera of British insects.] 2 v. 8°. *London*, 1839–40.

WET fuel, Furnaces burning. *See* **Thurston,** R. H. [*Add.*]

Wetherill, Charles M. The manufacture of vinegar; its theory and practice, with

Digitized by Google

Wetherill, Charles M.—Continued.
especial reference to the quick process. 12°. *Philadelphia*, 1860.

Wetli, K. Grundzüge eines neuen Locomotivsystems für Gebirgsbahnen, mit Bezugnahme auf die Schweizerische Alpenbahnfrage. roy. 8°. *Zürich*, 1868.

——— Technische Vorarbeiten der Gotthardbahn. 8°. *Zürich*, 1876.

Wettengel, Gustav Adolph. Vollständiges, theoretisch-praktisches Lehrbuch der Anfertigung und Reparatur aller noch jetzt gebräuchlichen Gattungen von italienischen und deutschen Geigen. *Illus.* 8°. *Ilmenau*, 1828. **37 Neuer Schauplatz der Künste.**

Wettenhall, —. Rudiments of the Greek language, upon the basis of. *See* **Rudiments.**

Wetterhahn, Georg. Weinklärapparat Selfactor. 8°. *Mainz*, 1876.

Weyrauch, Phil. Jacob J. Strength and determination of the dimensions of structures of iron and steel, with reference to the latest investigations. Transl. by A. Jay Du Bois. *Illus.* 8°. *New York*, 1877.

WHALING cruise, Etchings of a. *See* **Browne,** J. Ross.

Wharton, J. J. S. Law lexicon; or dictionary of jurisprudence, with an explanatory and literal translation of law maxims. Additions by E. Hopper. 2d Amer. from 2d London ed. 8°. *Philadelphia*, 1860.

What to eat, drink and avoid. *See* **Culverwell,** R. J. [*Add.*]

Whately, Richard. Easy lessons on reasoning. 3d Amer. from 5th London ed. 12°. *Boston*, 1868.

WHEAT. Mémoire sur la conservation des blés. *See* **Artigues,** d'.

——— Rapport sur les commerces du blé, de la farine et du pain du département de la Seine. *See* **France. Département de la Seine.**

Wheatstone, C. A reply to Mr. Cooke's pamphlet, 'The electric telegraph; was it invented by Prof. Wheatstone?' 8°. *London*, 1855.

WHEEL carriages, An essay on the construction of. *See* **Fry,** Joseph Storrs.

——— cutting machine, Rules for calculating the change wheels for screws for a. By J. La Nicca. *See* **Campin,** F.

Wheeler, Clark. The bee-keeper's guide; or practical remarks on the most advantageous, easy and profitable management of bees, to accompany and explain the eclective hive and drone trap. *Illus.* 16°. *New York*, 1856.

Wheeler, George M. Surveys west of the 100th meridian. *See* **United States. War dept. Bureau of engineers.**

Wheeler, Gervase. Homes for the people, in suburb and country; the villa, the mansion and the cottage, adapted to American climate and wants; showing how to alter and remodel old buildings. *Illus.* 12°. *New York*, 1855.

Wheeler, Nathaniel. Decisions in the sewing machine cases of Potter and Wheeler vs. Wilson and Stockmarr, etc. *See* **Nelson,** S., and **Smalley,** D. A.

Wheeler, William A. An explanatory and pronouncing dictionary of the noted names of fiction. 12°. *Boston*, 1866.

WHEELS. Catalogue of wheels manufactured by the patent friction gearing co. *See* **Friction** gearing co.

——— Paddle, and screw. By G. Rennie. *See* **Tredgold,** T. **Steam engine, series 2, v. 3.**

——— ——— By A. A. Mornay. *See* **Tredgold,** T. **Steam engine, series 1, v. 2.**

——— Railway engine and carriage. *See* **Barlow,** H. B.

——— Theory and properties of inclined plane. *See* **Sheldrake,** T.

——— Treatise on the teeth of. *See* **Camus,** Charles E. L.

——— Water. Expériences sur les roues hydrauliques. *See* **Morin,** A. J.

——— ——— Power of. By J. Rennie. **Weale's papers on engineering, v. 4.**

——— ——— Theorie und Bau der Wasserräder. *See* **Redtenbacher,** F.

——— ——— with ventilated buckets. By W. Fairbairn. *See* **Weale's papers on engineering, v 6.**

WHEELWRIGHT. Handbuch des Wagners. *See* **Beckmann,** Ludwig. **65 Neuer Schauplatz der Künste.**

——— Manuel du charron. *See* **Lebrun. 33 Manuels Roret.**

——— Zeitschrift für Stellmacher. *See* **Voigt,** B. F.

Whewell, William. Astronomy and general physics, considered with reference to natural theology. 12°. *London*, 1852.

Digitized by Google

Whewell, William. Bearing of the great exhibition on the progress of art and science. *See* **Lectures** on the results of the exhibition.

——— History of the inductive sciences from the earliest to the present times. 3 v. 8°. *London, Cambridge,* 1837.

——— The mechanical Euclid; containing the elements of mechanics and hydrostatics, after the manner of the elements of geometry. 12°. 2d ed., *Cambridge,* 1837. 5th ed., *Cambridge and London,* 1849.

——— The mechanics of engineering. 8°. *Cambridge,* 1841.

——— The philosophy of the inductive sciences, founded upon their history. 2 v. 8°. *London,* 1840.

——— Tides. *See* **Herschel, J. F. W. Manual of scientific enquiry.**

Whildin, Joseph K. Memoranda on the strength of materials used in engineering construction; compiled and ed. by. 12°. *New York,* 1860.

Whishaw, Francis. The railways of Great Britain and Ireland, practically described and illustrated. 2d ed. 4°. *London,* 1842.

WHISKEY. Manufacture and distillation of alcoholic liquors. *See* **Duplais,** *aîné et jeune.*

Whiston, William. A new theory of the earth, from its original to the consummation of all things. 8°. *Cambridge,* 1708.

Whitaker, Henry. House furnishing, decorating and embellishing assistant; designs in the Grecian, Italian, Renaissance, Louis Quatorze, Gothic, Tudor, and Elizabethan styles. 4°. *London,* 1847.

Whitall, Henry, and **Davis,** J. Improved planisphere, No. 3, of the starry heavens for every minute. [Two maps.] fol. *Philadelphia,* 1869.

White, Charles J. The elements of theoretical and descriptive astronomy. 12°. *Philadelphia,* 1869.

White, Francis Sellon. A history of inventions and discoveries, alphabetically arranged. 8°. *London,* 1827.

White, Franklin. Photographic scrapbook. 12°. *Lancaster, N. H.,* 1858.

White, George. Handbuch der Webekunst. *See* **Gilroy, C. G. 157 Neuer Schauplatz der Künste.**

——— A practical treatise on weaving by hand and power looms. *Illus.* 8°. *Glasgow,* 1846.

White, George Savage. Memoir of Samuel Slater; with a history of the rise and progress of the cotton manufacture in England and America; with remarks on the moral influence of manufactories in the United States. *Illus.* 8°. *Philadelphia,* 1836.

White, J. The art of ringing; rules for ringing all sorts of plain changes and cross peals. 24°. *London.*

White, J. D. Dental news letter; ed. by. *See* **Dental.**

White, James. A new century of inventions: designs and descriptions of machines relating to arts, manufactures, and domestic life. 4°. *Manchester,* 1822.

White, Richard Grant. Words and their uses, past and present. A study of the English language. 12°. *New York,* 1870.

White mountain (The) guide book. 18°. *Concord, N. H.,* 1858.

White, Samuel S. Catalogue of dental materials, furniture, instruments, etc. 8°. *Philadelphia,* 1867.

——— Same. 2 v. 8°. 1876.

White, William N. Gardening for the south; or how to grow vegetables and fruit; with additions, by J. Van Buren and James Camak. 12°. *New York,* 1868.

WHITEHEAD torpedo, Lecture on the, by F. M. Barber. *See* **United States. Navy dept. Ordnance papers.**

Whitehouse, W. F. Treatise on the cultivation of the sugar cane. *See* **Eight** practical treatises.

Whitehurst, John. An attempt toward obtaining invariable measures of length, capacity, and weight, from the mensuration of time, independent of the mechanical operations requisite to ascertain the center of oscillation, or the true length of pendulums. 4°. *n. p., n. d.*

——— An inquiry into the original state and formation of the earth. 3d ed. 4°. *London,* 1792.

——— Observations on the ventilation of rooms; on the construction of chimneys; and on garden stoves; collected from papers left by. 4°. *London,* 1794.

——— Three papers on different subjects, from the Philosophical transactions, viz: Thermometrical observations at Derby; Machine for raising water; Experiments on ignited substances. 4°. *n. t. p.* pp. 9. [The four above bound in 1 vol.]

Digitized by Google

Whitelaw, James. Steam navigation. *See* **Tredgold**, T. Steam navigation, appendices A and B.

Whiting, William. Argument in the case of Ross Winans vs. Orsamus Eaton et al., for an alleged infringement of his patent for the eight-wheel railroad car. Phonographically reported by Arthur Cannon. 8°. *Boston*, 1853. [Bound with Hubbell's arguments.]

Whitlock, George Clinton. Elements of geometry, theoretical and practical; containing explanation of the construction and use of tables, and a new system of surveying. 8°. *New York*, 1848.

Whitman, Charles Sidney. Patent laws, and practice of obtaining letters patent for inventions, in the United States and foreign countries, including copyright and trade mark laws. 8°. *Washington*, 1871. Later ed., 1875.

Whitmore, William H. The elements of heraldry; explanation of the principles of the science, and a glossary of the technical terms employed; with an essay upon the use of coat-armor in the United States. *Illus.* 8°. *New York* and *Boston*, 1866.

Whitney, Eli, Memoir of. *See* **Olmsted**, D.

Whitney, E. and A. B. Asiatic cholera; its origin, pathology, treatment and cure. 16°. *New-York*, 1866.

Whitney, J. D. The metallic wealth of the United States, compared with that of other countries. 8°. *Philadelphia*, 1854.

—— Report on the Lake Superior land district. *See* UNITED STATES. **Interior** department.

Whitney, J. P. Silver mining regions of Colorado, with an account of the processes introduced for working gold ores. 12°. *New York*, 1865.

Whitney, William Dwight. Language, and the study of language. Lectures on the principles of linguistic science. 12°. *New-York*, 1867.

—— The life and growth of language. 12°. *New-York*, 1875. **International scientific series, v. 16.**

Whittaker, Joseph. Mechanics' receipts for the use of founders, turners, and finishers of brass, britannia, and German silver; and for other useful and important purposes in the practical arts. 18°. *Boston*, 1847. pp. 24.

Whittlesey, Charles. Description of ancient works in Ohio. **Smiths'n contrib., v. 3.**

—— Fluctuations of level in the North American lakes. **Smiths'n contrib., v. 12.**

Whittock, Nathaniel. The decorative painter and glazier's guide; containing methods of imitating oak, mahogany, maple, rose, cedar, coral, and every other fancy wood; verd antique, dove, sienna, porphyry, white veined, and other marbles; in oil or distemper colours: designs for decorating apartments in various styles of architecture; directions for stenciling, and process for destroying damp in walls; art of staining and painting on glass; plans for the erection of apparatus for annealing it; method of joining figures together by leading, with examples from ancient windows. 4°. *London*, 1841.

—— and others. The complete book of trades, or the parent's guide, and youth's instructor; a popular encyclopædia of trades, manufactures, and commerce, as at present pursued in England. 8°. *London*, 1837.

Whitworth, Joseph. Canons rayés—systèmes Armstrong et Whitworth. *See* **Buchwalder**, E.

—— Miscellaneous papers on mechanical subjects. 8°. *London*, 1858.

—— New York industrial exhibition. Special report. fol. *London*, 1854. pp. 44.

—— and **Wallis**, George. The industry of the United States in machinery, manufactures, and useful and ornamental arts. Compiled from reports of. 16°. *London*, 1854.

Whole (The) art of legerdemain; or the black art laid open and explained, by Katterfelto, Comas, Jonas, and the most celebrated professors in natural magic; etc. 16°. *London, n. d.*

Whymper, Frederick. Travel and adventure in the territory of Alaska, and in various other parts of the North Pacific. 8°. *London*, 1868.

Wickersham, John B. A new phase in the iron manufacture; important instructions and improvements; historical sketch of iron; catalogue of the manufactures of the New York wire railing company. 4°. *New York*, 1857.

Digitized by Google

Wickersham, William. Report in the matter of application for a patent for sewing machines. *See* **Little,** A. B., and **Lawrence,** D. W. C.

Wiebe, E. Ueber die Reinigung und Entwässerung der Stadt Berlin. 8°; atlas, fol. *Berlin,* 1861.

Wiebe, F. K. H. Allgemeine Theorie der Turbinen. 8°. *Berlin,* 1868.

——— Skizzen-Buch für den Ingenieur und Maschinenbauer. Eine Sammlung ausgeführter Maschinen, Fabrik-Anlagen, Feuerungen, eiserner Bau-Constructionen, sowie anderer Gegenstände aus dem gesammten Gebiete des Ingenieurwesens. Bearb. und hrsg. von. Heft 1–114. fol. *Berlin,* 1858. [No titles; bound 2 years in each vol.]

Wieck, Friedrich Georg. Die Industrie-Ausstellung zu Leipzig; Vorwort von. *See* LEIPSIC.

Wiedersheim, A. Der Weinbau. Practische Anleitung zum Weinbau, nach mehr als 40jährigen Erfahrungen und mit Zugrundlegung von Siegli's Schrift: Die Traubensorten Würtemberg's, zugleich als Lehrbuch für die Fortbildungsschulen unserer Weingegenden; bearb. v. *Illus.* 8°. *Ravensburg,* 1872.

Wiener and co. Catalogue of invoice prices of all kinds of leather, covered and lined, japanned and lined, silver and gold plated, saddlery hardware, etc. *Newark, N. J.,* 1873.

WIESBADEN. Verein nassauischer Land- und Forstwirthe. Zeitschrift. Hrsg. von F. W. Dünkelberg. Jhrg. 1856-71. 8°. *Wiesbaden,* 1856-71.

Wiesner, Julius. Einleitung in die technische Mikroskopie nebst mikroskopisch-technischen Untersuchungen; etc. 8°. *Wien,* 1867.

——— Fremdliche Pflanzenstoffe zu industriellem Gebrauche. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

——— Die technisch verwendeten Gummiarten, Harze und Balsame. 8°. *Erlangen,* 1869.

WIG-making. Art du perruquier. Par F. A. P. de Garsault. *See* PARIS. **Acad. des sc.; arts et métiers, v. 29, also v. 14.**

Wiggins, Francis S. The American farmer's instructor, or practical agriculturist; comprehending the cultivation of plants, husbandry of domestic animals, and the economy of the farm. 8°. *Philadelphia,* 1844.

Wiggins, John. A practical essay on the most effectual modes of underdraining. 24°. *London,* 1847.

——— The practice of embanking lands from the sea. 12°. *London,* 1852. **Weale's series, Nos. 80*, 81*.**

Wigglesworth, E. Encyclopædia Americana; ed. by F. Lieber, assisted by. *See* **Encyclopædia.**

Wightwick, George. A selection from the museum of the Vatican, consisting of antique vases, altars, chairs, and various architectural fragments. *Illus.* fol. *London,* 1837.

Wilcox, Cadmus M. Rifles and rifle practice; treatise on the theory of rifle firing, with descriptions of the infantry rifles of Europe and the United States, their balls and cartridges. 12°. *New York,* 1859.

Wilda, Adolf. Landwirthschaftliches Centralblatt; hrsg. von. *See* **Landwirthschaftliches.** [*Add.*]

Wilder, Burt G. Silk from spiders. Rev. by. *See* **Termeyer,** Raymond Maria de.

Wilder, J. Locomotion by steam power on common and paved roads, far superior to horse power and railroads in economy, convenience and safety. 8°. *New York,* 1858. pp. 32.

Wildesen, Samuel. Every farmer his own farrier. A treatise on all the diseases of the horse; containing upwards of sixty sure and simple cures. 12°. *Baltimore,* 1866. pp. 28.

——— Receipts for curing the diseases of cattle and sheep, hog cholera, etc.; also how to make butter to keep hard and sweet for twelve months. 12°. *Baltimore,* 1866, pp. 16.

Wildman, E. Instructions in the manipulation of hard rubber or vulcanite, for dental purposes. roy. 8°. *Philadelphia,* 1866.

Wilds, William. Elementary and practical instructions on the art of building cottages and houses for the humbler classes. An essay on the construction of earthen walls. 8°. *London,* 1835.

Digitized by Google

Wilkes, Charles. Narrative of the United States exploring expedition during the years 1838–42. 5 v. imp. 8°. *Philadelphia*, 1845.

Wilkie, George. The manufacture of iron in Great Britain, with remarks on the employment of capital in iron works and collieries. 8°. *Edinburgh*, 1857.

Wilkins, A. S. The origin of the English people. **Science lectures for the people, series 3.**

Wilkins, F. How to manage gas. 2d ed. 24°. *London*, 1868. pp. 29.

Wilkins, John. An essay towards a real character and a philosophical language. l. 4°. *London*, 1668.

Wilkins, John. Mathematical and philosophical works; to which is prefixed the author's life, and an account of his works. 2 v. 8°. *London*, 1802.

Wilkinson, G. Experiments and observations on the cortex salicis latifoliæ, or broad-leafed willow bark, with remarks on the different species of the cinchona, etc. 12°. *Newcastle-upon-Tyne*, 1803.

Wilkinson, Henry. Engines of war: historical and experimental observations on ancient and modern warlike machines and implements; manufacture of guns, gunpowder, and swords, with remarks on bronze, iron, steel, etc. 8°. *London*, 1841.

Wilkinson, J. Gardner. On colour, and on the necessity of a general diffusion of taste among all classes; on laying out dressed or geometrical gardens. 8°. *London*, 1858.

——— Manners and customs of the ancient Egyptians, including their private life, government, laws, arts, manufactures, religion, and early history; derived from a comparison of the paintings, sculptures, and monuments still existing, with the accounts of ancient authors. *Illus.* 3 v. 8°. *London*, 1837–41.

——— A second series of the manners and customs of the ancient Egyptians, including their religion, agriculture, &c. 2 v. and vol. of plates. 8°. *London*, 1841.

Will, H. Annual report of the progress of chemistry; with the cooperation of. *See* **Liebig,** J. v., and **Kopp,** H.

Will, Heinrich. Jahresbericht über die Fortschritte der Chemie unter Mitwirkung v. *See* **Liebig,** J. v., and **Kopp,** H.

Will, Heinrich. Outlines of chemical analysis; transl from the 3d German edition by D. Breed and L. H. Steiner. 8°. *Boston and Cambridge*, 1855.

Willard, Elizabeth Osgood Goodrich. Sexology, as the philosophy of life; implying social organization and government. 8°. *Chicago, Ill.*, 1867.

Willard, X. A. Practical butter book; butter making at factories and farm dairies; selection, feeding, and management of stock for butter dairying. 12°. *New York*, 1875.

Willelmus, Ioannis. Catalogus ordinum equestrium. *See* **Bonannis,** P. Philippus.

Willement, Thomas. A concise account of the principal works in stained glass. 8°. *London*, 1840.

Williams' Cincinnati directory, 1872. 8°. *Cincinnati*, 1872.

Williams, B. Brown. A treatise on mental alchemy, physiology, biology, magnetism and mesmerism; with the cards of classes, editorials, etc. (making known their importance and remedial tendencies). 12°. *New York*, 1852.

Williams, Butler. A manual for teaching model-drawing, from solid forms; the models founded on those of Dupuis; combined with a popular view of perspective, and adapted to elementary instruction. 8°. *London*, 1843.

Williams, C. Greville. A handbook of chemical manipulation. 8°. *London*, 1857.

Williams, Charles. Dogs and their ways; illustrated by numerous anecdotes compiled from authentic sources. *Illus.* 16°. *London* 1863.

Williams, Charles J. B. Principles of medicine, comprising general pathology and therapeutics. Additions by M. Clymer. 4th Amer. ed. 8°. *Philadelphia*, 1853.

Williams, Charles W. The combustion of coal and the prevention of smoke chemically and theoretically considered. Part 1. 2d ed. *Illus.* 8°. *London*, 1841. Later ed., 1854.

Williams, Edwin. The addresses and messages of the presidents of the United States; inaugural, annual, and special, from 1789 to 1846: with a memoir of each of the presidents, and a history of their

Digitized by Google

Williams, Edwin—Continued.
administrations; also the constitution of the United States, and a selection of important documents and statistical information; compiled from official sources. 2 v. 8°. *New York*, 1848.

Williams, J. A. Progressive agriculture; a pamphlet on steam cultivation. 8°. *London*, 1858. pp. 22.

Williams, J. Butler. Practical geodesy; comprising chain surveying, and the use of surveying instruments, levelling, and tracing of contours, sanitary surveys of towns, trigonometrical colonial mining, and maritime surveying. 3d ed. 8°. *London*, 1855.

Williams, J. Frederick Lake. An historical account of inventions and discoveries in arts and sciences, from their origin, with subsequent improvements. 2 v. 8°. *London*, 1820.

Williams, J. H. and N. A. Circular, embracing a catalogue of manufacturers' supplies, dye stuffs, machinery, etc., used in the manufacture of goods; with directions, recipes, tables, and information for the use of manufacturers. 16°. *Utica, N. Y.*, 1868.

Williams, Robert Folkestone. An historical sketch of the art of sculpture in wood; with notices of the most remarkable works in this material remaining in Europe, and some account of their designs. 8°. *London*, 1835.

Williams, S. Wells. The middle kingdom; a survey of the geography, government, education, social life, arts, religion, etc., of the Chinese empire, and its inhabitants. *Illus.* 2 v. 12°. *New York and London*, 1848.

Williams, W. Mattieu. Explosive compounds. **British manufacturing industries, v. 2.** [*Add*]

——— Iron and steel. **British manufacturing industries, v. 1.** [*Add.*]

——— Oils and candles. **British manufacturing industries, v. 4.** [*Add.*]

Williamson, Alexander W. Chemistry for students. 12°. *Oxford*, 1865.

Williamson, Hugh. Observations on the climate in the different parts of America, compared with the climate in corresponding parts of the other continent. With introductory discourse to the history of North Carolina. 8°. *New York*, 1811.

Williamson, R. S. The use of the barometer on surveys and reconnaissances. Part 1. Meteorology in its connection with hypsometry. Part 2. Barometric hypsometry. 4°. *New York, London*, 1868. UNITED STATES. **War dept. Bureau of engineers. Professional papers, No. 15.**

——— and **Heuer,** W. H. Report upon the removal of Blossom rock. *See* UNITED STATES. **Dept. of war. Bureau of engineers.**

Williamson, Thomas. Agricultural mechanism: the vehicles, implements, and machinery connected with husbandry. 8°. *London*, 1810.

Williamson, W. C. Earthquakes and volcanoes. **Science lectures for the people, series 6.**

——— The natural history of paving stones. **Science lectures for the people, series 2.**

——— Pritchard's history of infusoria, enlarged and revised by. *See* **Pritchard,** Andrew.

Willich, A. F. M. The domestic encyclopædia; a dictionary of facts and useful knowledge, comprehending a concise view of the latest discoveries, inventions and improvements applicable to rural and domestic economy. 4 v. 8°. *London*, 1802.

Willis, Robert. Effects of weights travelling over elastic bars. *See* **Barlow,** P. Strength of materials.

——— Machines and tools for working in metal, wood, and other materials. *See* **Lectures** on the results of the exhibition.

——— Principles of mechanism. 8°. *London*, 1841. 2d ed., 1870.

——— A system of apparatus for the use of lecturers and experimenters in mechanical philosophy. *Illus.* 4°. *London*, 1851.

Willkomm, Gustav. Die Technologie der Wirkerei für technische Lehranstalten und zum Selbstunterrichte; von. 8°. *Leipzig*, 1875.

WILLOWS. Cortex salicis latifoliæ. *See* **Williamson,** G.

——— North American. *See* **Barralt,** J.

Willshire, William Hughes. A descriptive catalogue of playing and other cards in the British museum; accompanied by a concise general history of the subject, and remarks on cards of divination, and of a politico-historical character.

Digitized by Google

Willshire, William Hughes—Continued. With supplement. *Illus.* roy. 8°. [*London,*] 1876–77.

——— The principles of botany, structural, functional, and systematic, adapted to the use of students of medicine. 12°. *London,* 1839.

WILMINGTON (The) directory, for 1857, 1866–67. 8°. *Wilmington, Del.,* 1857, 1866–67.

Wilson, Andrew. Annual review of the trade and commerce of the city of Montreal, for the year ending December, 1857, Tables. 8°. [*Montreal,* 185-.] pp. 48.

Wilson, C. W. Palestine exploration. **Science lectures for the people, series 6.**

Wilson, Daniel. Prehistoric man; the origin of civilisation in the old and the new world. 2 v. 8°. *Cambridge and London,* 1862.

Wilson, Edward L. The American carbon manual: the production of photographic prints in permanent pigments. 12°. *New York,* 1868.

——— Photographic mosaics. *See* **Lea,** M. Carey.

——— The photographic world; edited by. 2 v. 8°. *Philadelphia,* 1871–72.

Wilson, Erasmus. The dissector's manual of practical and surgical anatomy; edited by William Hunt. 3d Amer. from last rev. London ed. *Illus.* 8°. *Philadelphia,* 1856.

——— A practical treatise on healthy skin: rules for treatment of cutaneous diseases. Notes by T. S. Lambert. 8°. *New York,* 1847.

——— A system of human anatomy, general and special. 4th Amer. ed.; edited by Paul B. Goddard. 8°. *Philadelphia,* 1848.

——— New ed., edited by W. H. Gobrecht. 8°. *Philadelphia,* 1858.

Wilson, G. F. On the manufactures of Price's patent candle company; with an account of the introduction and some of the uses of glycerine. 16°. *London,* 1856.

Wilson, George. Electricity and the electric telegraph; together with the chemistry of the stars; an argument touching the stars and their inhabitants. 12°. *London,* 1852.

Wilson, H. Trow's New York city directory; compiled by. 8°. *New York,* 1856–76——.

Wilson, H. Wilson's Binghamton directory, for 1857. 12°. *Binghamton,* 1856.

——— Wilson's Elmira directory, for 1857. 12°. *Elmira,* 1856.

——— Wilson's Hudson City directory for 1856–57. 12°. *Hudson,* 1856.

——— Wilson's Newburgh directory, for 1856–57. 12°. *Newburgh, N. Y.,* 1856.

Wilson, H. B. The American juror; a guide for jurymen throughout the United States. 12°. *Philadelphia,* 1868.

Wilson, J. The mechanic's and builder's price book; showing the price of wood, brick and stone work, painting and glazing, etc.; a dictionary of mechanical terms, and a treatise on architecture. 12°. *New York,* 1866.

Wilson, J. M. A treatise upon farm account keeping; with reference to Pond's system of account keeping. 4°. *London and Edinburgh,* 1848.

Wilson, James G. Case of Brooks et al. vs. Fiske and Norcross. *See* **Brooks,** A. L.

——— Decision in the matter of appeal from the decision of the commissioner of patents. *See* **Dunlop,** J.

——— Decisions in the sewing machine cases of Potter and Wheeler vs. Wilson and Stockmarr. *See* **Nelson,** S., and **Smalley,** D. A.

——— Opinion of Mr. Justice Woodbury in the case of, vs. Rousseau and Easton. *See* **Woodbury,** L.

Wilson, John. Lecture on flax; its treatment, agricultural and technical. 12°. *New York,* 1853.

——— Our farm crops; the cultivation, chemistry, diseases, remedies, etc., of the various crops cultivated in Great Britain and Ireland. 2 v. 12°. *Edinburgh,* 1859.

——— A treatise on English punctuation; with an appendix, containing a list of abbreviations, hints on proof-reading, etc. 2d ed. 12°. *Boston,* 1850. 14th ed., 1862.

Wilson, O. M. Digest of parliamentary law; compiled from American and English decisions of parliamentary writers; including the constitution of the United States, with the amendments thereto and their history; also the constitution of Indiana. 8°. *Indianapolis,* 1867.

Wilson, W. D. An elementary treatise on logic; including Part 1. Analysis of for-

Digitized by Google

Wilson, W. D.—Continued.
mulæ. Part 2. Method. With an appendix of examples for analysis and criticism; and a copious index of terms and subjects. 12°. *New York*, 1856.

Wilton, *Countess* of. Illuminated book of needlework; ed by. *See* **Owen,** *Mrs.* H.

Winans, Ross. Arguments of W. W. Hubbell; Winans vs. Eaton et al., for infringement. *See* **Hubbell,** W. W.

——— Argument of W. Whiting: Winans vs. Eaton et al., for infringement. *See* **Whiting,** W.

——— United States circuit court for the northern district of New York. Ross Winans vs. Orsamus Eaton, Uri Gilbert, and Ed. O. Eaton. Motion for injunction. 8°. *Syracuse*, 1852-53.

Winchell, Alexander. Sketches of creation; a view of some of the grand conclusions of the sciences in reference to the history of matter and of life. 12°. *New York*, 1870.

Winckelmann, John. The history of ancient art; transl. from the German of, by G. Henry Lodge; with a life of the author, by the editor. 2 v. 8°. *Boston*, [v. 2, 1849; v. 1, 1856.]

Winckler, Emil. Technisch-chemisches Recept-Taschenbuch. 6 Bde. 8°. *Leipzig*, 1861-63.

Winckler, Ferdinand. Theoretisch-praktisches Recept-Taschenbuch der Anilinfarben-Technik. 8°. *Ratibor*, 1871.

Winckler, Johann. Die periodische Presse Oesterreichs. Eine historisch-statistische Studie. Hrsg. von der k. k. statistischen Central-Commission. 8°. *Wien*, 1875.

WIND and current charts, Explanations of. *See* **Maury,** M. F.

WINDING apparatus, including mining hoists. *See* **Robertson,** J.

———, engines. Musterzeichnungen von Göpeln. *See* HESSE-DARMSTADT.

WINDS. *See* **Hopkins,** Thomas.

——— Das Gesetz der Winde, abgeleitet aus dem Auftreten derselben über Nordwest-Europa. *See* **Prestel,** M. A. F. **Naturf. Gesells. Kleine Schriften, 14.**

——— Law of storms and variable winds. *See* **Greenwood,** James. **Weale's series Nos. 55, 56.**

——— of the northern hemisphere. By J. H. Coffin. **Smiths'n contrib., v. 6.**

WINDS. Das System der Winde über den atlantischen Ocean. *See* **Prestel,** M. A. F. **Naturf. Gesells. Kleine Schriften, 10.**

——— Windrosen des südlichen Norwegens. *See* **Seue,** C. de.

WINE. *See, also,* **Wines.**

——— adulteration. La sophistication des vins. *See* **Gautier,** E. J. Armand.

——— and liquor dealer's guide, The Bordeaux. *See* BORDEAUX.

——— Artificial. Art de faire les vins artificiels. *See* **Dubief,** L. F. **102 Manuels Roret.**

——— Artificial coloring of. La coloration artificielle des vins, etc. *See* **Gautier,** E. J., *aîné.*

——— Champagne, with prefatory remarks upon wine and wine merchants. *See* **Tovey,** Charles.

——— Chemistry of. *See* **Mulder,** Gerardus J.

——— clarifying. Weinklärapparat Selfactor. *See* **Wetterhahn,** Georg.

——— Diseases of. *See* **Schmidt,** J. A.

——— Die Geschichte des Weinbaues in Schwaben. *See* **Dornfeld,** J.

——— in California, Report on production of. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

——— makers, brewers and distillers' guide. *See* **Bennett,** R.

——— makers' manual. *See* **Reemelin,** Charles.

——— making and grape culture, American. *See* **Mead,** Peter B.

——— making in all its branches. *See* **Booth,** David.

——— making and domestic wines, Remarks on the art of. *See* **Remarks.** [*Add.*]

——— Manuel des marchands de vins. *See* **Landier. 70 Manuels Roret.**

——— Manuel du sommelier. *See* **Jullien,** A. **63 Manuels Roret.**

——— Der Nassauische Weinbau. *See* **Dünkelberg,** Friedrich Wilhelm.

——— Obst- und Weinbau. *See* **Illustrirte** Monatshefte.

——— Oenologie. *See* **Aubergier.**

——— Der rationelle Weinbau, und die Weinbereitungs-Lehre. *See* **Dornfeld,** J.

——— Traité de vinification. *See* **Machard,** H.

——— Verbesserter praktischer Weinbau, in Gärten und auf Weinbergen. *See* **Kecht,** S. W.

Digitized by Google

WINE, the vine, and the cellar. *See* **Shaw**, Thomas G.

—— Der Wein, seine Bestandtheile, und seine Behandlung. *See* **Neszler**, J.

—— Wein-, Obst- und Gemüsebau. Von H. Goethe. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2.**

—— Wein. Von Franz Leibenfrost. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

—— Der Weinbau nach der Reihen-Folge der vorkommenden Arbeiten, nebst Anleitung zur Bereitung und Pflege des Weines. *See* **Babo**, L. von.

—— Weinbauschule, oder Anleitung zu Pflanzung der Rebe und Gewinnung des Weins. *See* **Dornfeld**, J.

Winer, George Benedict. A grammar of the idiom of the New Testament. 7th ed., improved by Gottlieb Lünemann. roy. 8°. *Andover*, 1869.

Wines, E. C. Commentaries on the laws of the ancient Hebrews; with an introductory essay on civil society and government. 8°. *New York*, 1853.

WINES and vineyards, French. *See* **Redding**, Cyrus.

—— Art of making British. *See* **Robinson**, James.

—— A description of modern. *See* **Redding**, Cyrus.

—— Domestic, cordials, liquors, etc. *See* **Cristiani**, R. S. [*Add.*]

—— Feinste Dessertweine, etc. *See* **Gall**, Ludwig.

—— History of ancient and modern. *See* **Henderson**, Alexander.

—— Manufacture of American. *See* **Husmann**, George.

Winkler, E. Die Lehre von der Elasticitaet und Festigkeit mit besonderer Rücksicht auf ihre Anwendung in der Technik. *Illus.* 8°. *Prag*, 1867.

—— Vorträge über Brückenbau. 1. Theil. Theorie der Brücken. 2. Brücken im Allgemeinen. Steinerne Brücken. 3. Hölzerne Brücken. 4. Eiserne Brücken. 5. Herstellung der Brücken. 8°. *Wien*, 1872–77.

—— Vorträge über Eisenbahnbau. Gehalten am königl. böhmischen polytechnischen Landesinstitute in Prag. Heft 1–5, 4°. Heft 11, 8°. [From H. 3, Gehalten an verschiedenen polytechnischen Schulen, begonnen von Winkler.] *Prag*, 1867–74.

Winkler, J. A. E. Hints to piano-forte players. 12°. *Richmond*, 1847. pp. 24.

Winslow, Charles Frederick. Force and nature; attraction and repulsion; the radical principles of energy, discussed in their relations to physical and morphological developments. 8°. *Philadelphia*, 1869.

Winslow, E. S. Comprehensive mathematics: numerical, arithmetical, and mathematical facts, tables, data, and formulas. 6th ed. 12°. *Boston*, 1867.

—— Computist's manual of facts; and merchant and mechanic's calculator and guide. 3d ed. 18°. *Boston*, 1853.

—— Foreign and domestic commercial calculator. 4th ed. 12°. *Boston*, 1867.

—— The tin-plate and sheet-iron worker's monitor. 12°. *Boston*, 1867.

WIRE. Art de convertir le fer en fil. Par H. L. Duhamel du Moncean. PARIS. **Acad. roy. des sc.; arts et métiers, v. 8, also v. 15.**

—— Der Drahtzieher. *See* **Harzer**, F. **188 Neuer Schauplatz der Künste.**

—— fencing. Description, with illustrations of iron and wire fences, etc. *See* Young, C. D., and co.

—— —— A treatise on. *See* **Treatise.**

—— Nadler-arbeiter u. s. w. *See* **Höck**, J. D. A. **31 Neuer Schauplatz der Künste.**

—— railing. Descriptive catalogue of the New York wire railing co. *See* **Wickersham**, J. B.

—— rope. Die Drahtseilriese mit besonderer Berücksichtigung der Holztransport-Einrichtung im kleinen Schlierenthal, Kanton Unterwalden. *See* **Fankhauser**, F.

—— —— Transmission of power by. *See* **Stahl**, Albert W. **Van Nostrand's science series, No. 28.**

Wirth, Franz. Die Patent-Reforme. 18°. *Frankfurt a. M.*, 1875.

WISCONSIN. Academy of sciences, arts, and letters. Transactions, 1870–1872. 8°. *Madison, Wis.*, 1872.

—— Antiquities of. By I. A. Lapham. **Smiths'n contrib., v. 7.**

—— Gazetteer of. *See* **Hunt**, J. W.

Digitized by Google

WISCONSIN, History of. *See* **Smith**, William R.

——— Travels in. *See* **Carver**, J.

Wise, George. The autograph of William Shakespeare; with fac similes of his signature as appended to various legal documents, together with 4000 ways of spelling the name according to English orthography. sm. 4°. *Philadelphia*, 1869.

Wise, John. A system of aeronautics; its earliest investigations, and modern practice and art; with history of the author's fifteen years' experience in aerial voyages. 8°. *Philadelphia*, 1850.

Wise, W. Lloyd. Patents. Notes for the guidance of inventors: part of a series of articles. Reprinted from 'Engineering.' 4°. *London*, 1875. pp. 12.

With, Émile. Les métaux, mines, mineurs et industries métallurgiques. 8°. *Paris*, *n. d.*

——— Railroad accidents; their causes and means of preventing them. With introduction by A. Perdonnet. Transl. from the French, with an appendix, by G. F. Barstow. 12°. *Boston*, 1856.

Withers, W. The acacia tree; robinia pseudo acacia; its growth, qualities and uses; with observations on planting, manuring and pruning. 8°. *London*, 1842.

Witter's improved interest tables, from 1 cent to 1000 dollars; at 6 per cent and at 10 per cent, from one day to six years. 8°. *St. Louis*, 1858.

Wittstein, G. C. Anleitung zur Darstellung und Prüfung chemischer und pharmaceutischer Präparate. 8°. *München*, 1851.

——— Taschenbuch der Geheimmittellehre. Eine kritische Uebersicht aller bis jetzt untersuchten Geheimmittel. Zunächst für Aerzte und Apotheker. 12°. *Nördlingen*, 1867.

WOAD. Anstellung der Waidindigküpe. *See* **Scherf**, C. F. **120 Neuer Schauplatz der Künste.**

WOBURN (The) directory, for 1868. 8°. *Woburn, Boston*, 1868.

Wochenbände. [Translations of English treatises.] 8 Bde. 16°. *Stuttgart*, 1847.

CONTENTS.

Nos. 69–73. Kapital und Arbeit. Von Charles Knight.
74–84. Vorschule der Thierkunde.
85–90. Geschichte des Pferdes. Von W. C. L. Martin.

Wochenbände—Continued.

Nos. 91–100. Baukunst der Insekten. Von James Rennie.
106–113. Die Menagerie. 1ster Band. Von James Rennie.
129–133. Darstellung der Electrizität. Von P. M. Roget.
152–156. Darstellung des Magnetismus. Von P. M. Roget.
157–163. Die geheimen Gesellschaften des Mittelalters.

Wochenschrift für Thierheilkunde und Viehzucht. Hrsg. von T. Adam, G. Nicklas und W. Probstmayer. Jahrg. 1–8. 8°. *Augsburg*, 1857–64.

Woehler, Friedrich. The analytical chemist's assistant; a manual of chemical analysis, both qualitative and quantitative, of natural and artificial inorganic compounds; rules for detecting arsenic in a case of poisoning. Transl. from the German by O. M. Lieber. 12°. *Philadelphia*, 1852.

Wohlgemeinte Andeutungen zur Waldwirthschaft und Holzzucht, für Gutsbesitzer, Bauern und Oekonomen in Bayern. 12°. *München*, 1854.

Wolf, Emil. Qualitativ-chemische Untersuchung anorganischer Stoffe. 8°. *Stuttgart*, 1867.

——— Same. 2e Aufl. 8°. *Stuttgart*, 1876.

Wolf, Heinrich. Steinwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 9.**

Wolf, K. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH.

Wolf, Rudolf. Mittheilungen über Sternschnuppen und Feuerkugeln. (Aus der Vierteljahresschrift der naturforschenden Gesellschaft in Zürich besonders abgedruckt.) 8°. *Zürich*, 1856. pp. 32.

——— Mittheilungen über die Sonnenflecken. 8°. *Zürich*, 1856. pp. 50.

Wölfer, Marius. Anweisung zur Construction einer neuen, verbesserten Trauben- und Saftpresse. *Illus.* 8°. *Quedlinburg und Leipzig*, 1846. pp. 11.

——— Gründliche Anweisung zum Treppenbau. *Illus.* 4te Aufl. 16°. *Weimar*, 1843. **19 Neuer Schauplatz der Künste.**

——— Die Kalk- und Gypsbrennerei. *Illus.* 8°. *Ilmenau*, 1827. **28 Neuer Schauplatz der Künste.**

——— Der Pergamentmacher, Leim- und Potaschensieder. 3 Theile in 1. *Illus.* 8°. *Weimar*, 1838. **94 Neuer Schauplatz der Künste.**

Digitized by Google

Wölfer, Marius. Praktisches Lehrbuch zur Anfertigung der Bauanschläge und Baurisse von Wohn- und Landwirthschafts-Gebäuden, sowie Anweisungen zu deren Ausführung, nebst der dazu erforderlichen Materialienkunde. 8°. Atlas, 4°. *Quedlinburg und Leipzig*, 1841–45.

——— Das Seiler-Handwerk nach seinem ganzen Umfange. *Illus.* 8°. *Weimar*, 1837. **91 Neuer Schauplatz der Künste.**

Wolff, E. Die landwirthschaftlich-chemische Versuchsstation Hohenheim. Deren Einrichtungen und Thätigkeit in den Jahren 1866–70. 8°. *Berlin*, 1871.

Wolff, Emil. Aschen-Analysen von landwirthschaftlichen Producten, Fabrik-Abfallen und wildwachsenden Pflanzen. 4°. *Berlin*, 1871.

——— Die mittlere Zusammensetzung der Asche aller land- und forstwirthschaftlich wichtigen Stoffe. 8°. *Stuttgart*, 1865.

——— Die rationelle Fütterung der landwirthschaftlichen Nutzthiere. 12°. *Berlin*, 1874.

——— Die wichtigeren Gesteine Württembergs, deren Verwitterungsproducte und die daraus entstandenen Ackererden. II., III. *Stuttgart*, 1867–71.

Wolfrum, Gustav Adolph Carl. Münzen-Vergleichung mit Paritäts-Berechnung der Gewichte der meisten Länder Europa's und von Nord-Amerika. 4°. *Frankfurt am Main*, 1863.

Wolowski, Louis. Études d'économie politique et de statistique. Le paupérisme des Flandres. L'exposition agricole et industrielle de Bruxelles. Le commerce des grains. L'union douanière. De la liberté commerciale. De la statistique. 8°. *Paris*, 1848.

Wolpert, Adolph. Principien der Ventilation und Luftheizung. Nebst Anleitung zur Verhütung des Rauchens der Stubenöfen und Kochherde. *Illus.* 8°. *Braunschweig*, 1860.

Wolschitz, J. L. Zusammenstellung, Bestimmungen und Tarife, für telegraphische Correspondenz der Vereins-Telegraphen-Station. 4°. *Wien*, 1869.

Woltersdorf, E. G. Das Ganze der Brot-, Semmel-, Kuchen- und Pfefferkuchenbäkkerei. 8°. *Ilmenau*, 1824. **7 Neuer Schauplatz der Künste.**

WOMAN, her diseases and their remedies. *See* **Meigs,** Charles D.

WOMEN and children, Diseases of. *See* **Bedford,** Gunning S.

——— Diseases of. *See* **Churchill,** Fleetwood.

——— Diseases of. *See* **Thomas,** T. Gaillard.

——— Diseases of. Cours complet d'accouchemens et de maladies de femmes. *See* **Hatin,** Jules.

WONDERFUL things, Ten thousand. *See* **King,** Edmund Fillingham.

WONDERS, Illustrated library of. *See* **Illustrated** library.

——— of nature and art, etc. *See* **Smith,** Thomas. [*Add.*]

Wood, Alphonso. The American botanist and florist; lessons on the structure, life and growth of plants, with a simple analytical flora. 12°. *New York and Chicago*, 1870.

Wood, Edward George. A catalogue of photographic cameras, lenses, apparatus, pure chemical preparations, etc. 12°. [*London*], 1854. pp. 32.

Wood, Edward J. Curiosities of clocks and watches, from the earliest times. 8°. *London*, 1866.

Wood, George B. A treatise on the practice of medicine. 6th ed. 2 v. 8°. *Philadelphia*, 1866.

——— and **Bache,** Franklin. The dispensatory of the United States of America. 10th ed. 8°. *Philadelphia*, 1854. 11th ed., 1858. 12th ed., 1866. 13th ed., 1874. 14th ed., 1877.

Wood, Henry. A series of designs of furniture and decoration, in the styles of Louis 14th, Francis 1st, Elizabeth, and Gothic. fol. *London*, 1845.

Wood, J. G. Athletic sports and recreations for boys. *Illus.* 8°. *London*, 1861.

——— Homes without hands; a description of the habitations of animals. 8°. *London*, 1866.

Wood, Nicholas. A practical treatise on railroads, and interior communication in general. Containing an account of the performances of different locomotive engines at and subsequent to the Liverpool contest; experiments, with tables of the comparative value of canals and railroads, and the power of the present locomotive engine. 1st Amer. from 2d London ed., with notes. An appendix, con

Digitized by Google

Wood, Nicholas—Continued.
taining an account of railroads in Europe and the United States. *Illus.* 8°. *London*, 1832. 3d ed. *London*, 1838.
——— Recherches sur les rails et leurs supports. *See* **Barlow**, Peter.

Wood, William. Manual of physical exercises; rules for training and sanitary suggestions. 12°. *New York*, 1867.

Wood, William Maxwell. Hints to the people upon the profession of medicine. 12°. *Buffalo*, 1852.

WOOD and its uses. *See* **Bassie**, P. B.
——— Art of sculpture in. *See* **Williams**, R. F.
——— carving, Manual of. *See* **Bemrose**, William.
——— ——— Original designs for. *See* **B.**, A. F.
——— cutting. Schule der Holzschneidekunst. *See* **Schasler**, Max.
——— Eigenschaften der Hölzer. *See* **Nördlingen**, H.
——— engraving, A treatise on. *See* **Jackson**, John.
——— industries, Report on. By N. M. Lowe. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**
——— Katalog der Hölzer-Sammlung des allgemeinen österreichischen Apotheker-Vereines. *See* **Fuchs**, Josef.
——— Machine tools,—wood, metal and stone. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 21.**
——— machines. Machines-outils et outils à la main propres à travailler le bois. *See* **Bernier**, *aîné*, and **Arbey**, F.
——— Manuel des marchands de bois. *See* **Marié de l'Isle**, E. B. **62 Manuels Roret**
——— Maschinen zur Bearbeitung des Holzes. *See* **Schmidt**, R.
——— Die mechanischen Eigenschaften des Holzes. *See* **Chevandier**, E., and **Wertheim**, G. [*Add.*]
——— Musterzeichnungen von Werkzeugen für Holzarbeiter. *See* HESSE-DARMSTADT.
——— staining. Das Beizen, Schleifen und Poliren des Holzes, etc. *See* **Schmidt**, Wilhelm. **107 Neuer Schauplatz der Künste.**
——— ——— Die Holzbeizkunst. *See* **Thon**, C. F. G. **107 Neuer Schauplatz der Künste.**

WOOD. Die trockene Destillation des Holzes. *See* **Assmuss**, Eduard.
——— type, Rule and border, for sale by the American Printer's warehouse. 8°. *New York*, 1873.
——— ——— Supplementary specimens of. *See* **Webb**, E. R.
——— Wooden ware. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 7.**
——— work. Die Werkzeug- und Holzbearbeitungs-Maschinen. *See* **Meissner**, G.
——— working machines. *See* **Richards**, J.
——— ——— Atlas für mechanische Technologie. Holzverarbeitung. *See* **Kronauer**, J. H.
——— ——— machines. Holzbearbeitungs-Maschinen. Von W. F. Exner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Woodbridge, W. E. Report on the mechanical properties of steel. *See* UNITED STATES. **War dept. Bureau of ordnance.**

Woodbury, Daniel P. Sustaining walls; with extensions, by. *See* **Poncelet**, J. v. UNITED STATES. **War dept. Bureau of engs. Papers on engineering, No. 3.**
——— Treatise on the various elements of stability in the well-proportioned arch; with numerous tables of the ultimate and actual thrust. 8°. *New York*, 1858. UNITED STATES. **War dept. Bureau of engs. Papers on engineering, No. 7.**

Woodbury, Levi. Opinion of Mr. Justice Woodbury, upon the construction of the last clause of the 18th section of the patent act of 1836. Dec. term, 1846. 8°. *n. t. p.* pp. 36.

Woodcroft, Bennet. Alphabetical indexes of patentees by. *See* GREAT BRITAIN. **Great seal patent office.**
——— Appendix to the specifications of English patents for reaping machines. 8°. *London*, 1853.
——— Chronological indexes of patents, by. *See* GREAT BRITAIN. **Great seal patent office.**
——— Pneumatics; ed. by. *See* **Hero.**
——— Reference index of patents, 1617 to 1852; by. *See* GREAT BRITAIN. **Great seal patent office.**
——— A sketch of the origin and progress of steam navigation. *Illus.* sm. 4°. *London*, 1848. [2 copies.]

Digitized by Google

Woodcroft, Bennet. Subject matter indexes of patents, by. *See* GREAT BRITAIN. **Great seal patent office.**

—— Supplement to letters patent. *See* GREAT BRITAIN. **Great seal patent office.**

Woods, Edward. Consumption of fuel and evaporation of water in steam engines. *See* **Tredgold,** T. Steam engine, 2d series, v. 1.

—— Fuel in the locomotive engines of the Liverpool and Manchester railway. **Weale's papers on engineering, v. 2.**

Woods, John W. Baltimore directory, 1873–75. 8°. *Baltimore,* 1873–75.

Woodville, William. Medical botany; systematic and general descriptions of all the medical plants in the catalogue of the materia medica. 3d ed. by W. J. Hooker and G. Spratt. *Illus.* 5 v. 4°. *London,* 1832.

Woodward, Charles. A familiar introduction to the study of polarized light, descriptions of, and instructions for using the table and hydro-oxygen polariscope and microscope. 2d ed. 8°. *London,* 1851.

Woodward, George E., and **Woodward,** F. W. Architecture, landscape gardening, and rural art No. 1, 1867. 16°. *New York,* 1867.

—— and **Thompson,** E. G. National architect. 4°. *New York,* 1869.

Woodward, John. An essay toward a natural history of the earth and terrestrial bodies, especially minerals; as also of the sea, rivers and springs, with an account of the universal deluge, etc. 18°. *London,* 1695.

Woodward, Joseph Janvier. Address on the medical staff of the United States army. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Description of the models of hospital cars. Philadelphia exhibition, 1876. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Description of the models of hospitals. Philadelphia exhibition, 1876. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Description of the models of hospital steam vessels; exhibited, Philadelphia, 1876. *See* UNITED STATES. **War dept.** Surgeon general's office.

Woodward, Joseph Janvier. List of microscopical preparations, United States army medical museum, exhibited, Philadelphia, 1876. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Report on an improved method of photographing histological preparations. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Report on two cases of cancer. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Specimens from medical section of army medical museum, exhibited, Philadelphia, 1876. *See* UNITED STATES. **War dept.** Surgeon general's office.

—— Typho-malarial fever. *See* UNITED STATES. **War dept.** Surgeon general's office.

Woodworth, William W. Case of Brooks et al. vs. Fiske and Norcross. *See* **Brooks,** A. L.

—— Report of the case of Sloat, assignee of W., vs. Spring et al. *See* **Harding,** G.

WOOL and its applications. **British manufacturing industries, v. 5.** [*Add.*]

—— and manufactures of wool. By E. R. Mudge and J. L. Hayes. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 6.**

—— and woollen wares. Schafwolle und Schafwollwaaren. Von Carl T. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

—— Das Geheimniss der wohlfeilen Erzeugung und günstigsten Ausbildung edler Wolle. *See* **Elsner,** J. G.

—— History of. *See* **History.**

—— Report on. By J. R. Dodge. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 1.**

—— Travail de la laine cardée. *See* **Thomme,** Léon. [*Add.*]

WOOLLEN cloth, The art of designing and manufacturing. *See* **Barnard,** W. C.

—— cloths from samples, The art of designing fancy cotton and. *See* **Arthur,** F. T. [*Add.*]

—— fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 9.**

—— manufactures. Art de friser ou ratiner les étoffes de laine. Par H. L. Duhamel du Monceau. PARIS. **Acad. roy. des sc.; arts et métiers, v. 30, also 7.**

Digitized by Google

WOOLLEN manufactures. Art du fabriquant d'étoffes en laine. Par J. M. Roland de la Platière. PARIS. **Acad. des sc.; arts et métiers, v. 30, also 19.**

——— ——— Handbuch des Woll-Manufacturwesens. **Hartmann**, C. F. A., and **Schmidt**, C. H. **122 Neuer Schauplatz der Künste.**

——— textures. Schafwoll-Gewebe. Von Carl T. Richter und C. Falk. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— yarn. Dyeing in all shades of colors. *See* **Duempelmann**, W. F. [*Add.*]

Woolf's patent steam engine. *See* **Weale's papers on engineering, v. 4.**

Woolhouse, W. S. B. The elements of the differential calculus. 2d ed. 12°. *London*, 1854. **Weale's series, No. 101.**

——— The measures, weights, and moneys of all nations; and an analysis of the Christian, Hebrew, and Mahometan calendars. 12°. *London*, 1856. **Weale's series, No. 101*.**

——— Steam engine; with theory of, and rules for calculating the same; ed. by. *See* **Tredgold**, T. Steam engine, 1st series.

Woolnough, C. W. The art of marbling, as applied to book edges and paper; instructions for executing British, French, Spanish, Italian, nonpareil, etc. A notice of its application to textile fabrics, particularly to the cloths so extensively used by bookbinders. *Illus.* 16°. *London*, 1853.

Woolsey, Theodore. Political science; or the state theoretically and practically considered. 2 v. 8°. *New York*, 1878.

Worcester, *Marquis of*. Century of inventions. *See* **Somerset**, E.

——— Life of. *See* **Diroks**, Henry.

Worcester, Joseph E. A comprehensive dictionary of the English language. 8°. *Boston*, 1860.

——— A dictionary of the English language. 4°. *Boston*, 1860. Also eds. 1864, 1873, 1877.

——— An historical atlas. fol. 12 charts. *Boston*, 1856.

——— Universal and critical dictionary of the English language. 8°. *Boston*, 1850. Also eds. 1853, 1855, and 1858.

WORCESTER (Mass.) Directory for 1857, 1858, 1865, 1867–69. By Henry J. Howland. 8° and 18°.

——— The heart of the commonwealth: or Worcester as it is; being a correct guide to all the public buildings and institutions, and to some of the principal manufactories and shops. sm. 4°. *Worcester*, 1856.

——— Young men's library association. 3d annual report, 1856. 5th report, April 12, 1858; with the constitution, by-laws, list of officers, life members, etc. 12°. *Worcester, Mass.*, 1856–58.

Worden, John. Dictionary of photography: chemical articles. *See* **Sutton**, T.

WORDS and their uses. *See* **White**, Richard Grant.

——— Glossary of English words used formerly in senses different from their present. *See* **Trench**, Richard Chenevix.

——— The meaning of. *See* **Johnson**, A. B.

——— Rambles among. *See* **Swinton**, William.

——— Study of. *See* **Trench**, Richard Chenevix.

Wordsworth, Charles. A summary of the laws of patents, and of extension of patents; with forms and all the statutes. sm. 8°. *London*, 1853.

WORKED lumber. *See* PHILADELPHIA. **Internat. exhib. 1876, Group 6.**

Working drawings and designs in mechanical engineering and engine-making, with essays on various subjects. Illustrated by W. Walker, Francis Lightboy, and A. B. Brown; Robert Davis and Robert Scott Brown (gen. editor). fol. *Edinburgh and London, n. d.* [†]

WORKING drawings for the designs published in Village and farm cottages. *See* **Cleveland**, H. W., etc. [*Add.*]

——— men. Der Arbeiterfreund. Zeitschrift für das Wohl der arbeitenden Klassen. *See* **Arbeiterfreund.**

——— ——— Zur Statistik der Arbeiter-Verhältnisse. *See* AUSTRIA.

Workshop (The). A monthly journal devoted to progress of the useful arts; ed. by W. Baumer, J. Schnorr and others. v. 1–9, 1868–76. 4°. *New York*, 1868–76———.

WORKSHOP appliances. *See* **Shelley**, C. P. B.

——— receipts. *See* **Spon**, Ernest. [*Add.*]

Digitized by Google

WORLD, Accompaniment to the map of the. *See* **Mitchell**, S. A.

——— (The) before the deluge. *See* **Figuier**, (Guillaume) Louis.

——— in a pocket-book, The. *See* **Crump**, William H.

——— Le monde. *See* **Descartes**, Renatus.

——— (The) of science, art, and industry; exhibitions of 1853–54. Ed. by B. Silliman, jr., and C. R. Goodrich. *Illus.* 4°. *New York*, 1854.

——— pictures in capitals. *See* **Potter**, Edward Tuckerman.

——— under-ground. *See* **Klimius**, Nicholas.

WORLD'S fairs. *See* **Exhibitions**, Industrial.

Wormald, John. Value of artificial fuels, as compared with coal. *See* **Siemens**, C. William. **Van Nostrand's science series, No. 9.**

Wormley, Theodore G. Micro-chemistry of poisons; including their physiological, pathological and legal relations. 8°. *New York*, 1867.

WORMS. Grossherzoglich-hessische Handels-Kammer. Jahres-Bericht. Jahrg. 1864–66—1874-75. 8°. *Worms*, 1867–76——.

Wornum, Ralph N. The epochs of painting, characterized; a sketch of the history of painting, ancient and modern. 24°. *London*, 1847.

Worssam, S. W., *jr.* On mechanical saws. 8°. *London*, 1868. pp. 36.

WORTH and wealth. *See* **Hunt**, Freeman.

Worthen, W. E. Appleton's cyclopædia of drawing; ed. by. 8°. *New York*, 1857.

Worthington, James T. Manual of fig culture in the northern and middle states. 12°. *Chillicothe, O.*, 1869. pp. 10.

Worthington, Nicholas B. American farmer; ed. by. *See* **American.**

WOVEN fabrics, Report on, by P. Stevens. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 6.**

——— ——— Wirkwaaren. Von Ludwig Glogau. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Wray, Leonard. The practical sugar planter; an account of the cultivation and manufacture of the sugar-cane, according to the latest and most improved processes: describing and comparing the different systems pursued in the East and West Indies, and the Straits of Malacca,

Wray, Leonard—Continued.
and the relative expenses and advantages attendant upon each. *Illus.* 8°. *London*, 1848.

Wright, A. S. Three thousand receipts; the American receipt book, or complete book of reference. *Philadelphia, n. d.*

Wright, Andrew. Court-hand restored, or the student's assistant in reading old deeds, charters, records; describing the old law hands, with their contractions and abbreviations. 8th ed. 4°. *London*, 1846.

Wright, E. P. Natural history review; ed. by. *See* **Natural** history.

Wright, John. Christianity and commerce the natural results of the geographical progression of railways; or, a treatise on the advantage of the universal extension of railways in our colonies and other countries, and the probability of increased natural intercommunication leading to the early restoration of the land of promise to the Jews. 8°. *London, n. d.*

Wright, Joseph W. Cordialanica; or the rectifier's guide to the making of cordials, liqueurs, etc. 24°. *New York*, 1855.

Wright, Lewis. The Clifton and other remarkable suspension bridges in the world. *Illus.* 12°. *London*, 1865.

Wright, T. Ethnology; by J. C. Prichard; rev. by. *See* **Herschel**, J. F. W. Manual of scientific enquiry.

Wright, Thomas. Dictionary of obsolete and provincial English, previous to the 19th century, of words no longer in use, not used in the same sense; and words used only in the provincial dialects. 2 v. 8°. *London*, 1857.

——— The homes of other days; a history of domestic manners and sentiments in England from the earliest known period to modern times. roy. 8°. *New York*, 1871.

——— Popular treatises on science, written during the middle ages, in Anglo-Saxon, Anglo-Norman and English. 8°. *London*, 1841.

Wright, William. Grotesque architecture, or rural amusement; consisting of plans, elevations and sections for huts, retreats, etc. 8°. *London, n. d.*

Wright, William. The national system of book-keeping. 4°. *Philadelphia*, 1866.

Digitized by Google

Wrighton, *Prof.* Agricultural machinery. **British manufacturing industries, v. 10.** [*Add*]

Wrinkles and recipes; from the Scientific American. A collection of practical suggestions, processes and directions for the mechanic, the engineer, the farmer, and the housekeeper; ed. by Park Benjamin. 16°. *New York*, 1875.

WRITING, drawing, painting, materials. Schreib-, Zeichnen- und Maler Requisiten. Von Ignatius Nagel. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

——— instructions. Schreibunterricht. Von J. Hüpscher. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— instruments and materials. **Abridgments English Patents, No. 37.**

——— instruments and materials. Der Schreibmaterialist. *See* **Vollständige. 176 Neuer Schauplatz der Künste.**

——— The origin and progress of. *See* **Astle,** Thomas.

——— short hand, Art of. *See* **Smith,** G.

——— Universal English short-hand. *See* **Byrom,** J.

Wrottesley, John Lord. Treatise on navigation. LONDON. **Society of useful knowledge, v. 3.**

Wulffen, Carl von. Entwurf einer Methodik zur Berechnung der Feldsysteme. 8°. *Berlin*, 1847.

WURTEMBERG. Die Albwasser-Versorgung im Königreich Württemberg. Unter Regierung Seiner Majestät König Karl. 4°. *Stuttgart*, 1873. pp. 46.

——— Centralstelle für Gewerbe und Handel. Bericht an das königliche Ministerium des Innern vom 23. Mai 1862. Betreffend den Handelsvertrag zwischen dem Zollverein und Frankreich. 8°. *Stuttgart*, 1862.

——— Exhibition of 1855, Descriptive catalogue of. *See* STUTTGART. **Württembergische** Handelsgesellschaft.

——— Gemeinfaszliche natürliche Beschreibung Württembergs, mit besonderer Beziehung auf die Landwirthschaft. *See* **Hainlen,** K. Chr.

——— Die geognostischen Verhältnisse und Bodenarten Württembergs in ihrer Beziehung zur Landwirthschaft. *See* **Clas,** G.

WURTEMBERG. Handels- und Gewerbekammer in Württemberg. Jahresberichte für Jahren 1858–1875. [1864–68, 1871, missing.] 8°. *Stuttgart*, 1859–76——.

——— Landesprodukten-Börse in Stuttgart. Jahres-Bericht, für die General-Versammlung am 18. Mai 1874; von J. G. Sting, in Cannstatt. 8°. *Stuttgart*, 1874.

——— Katalog der württembergischen Erzeugnisse in der Industrie-Ausstellung zu München. *See* MUNICH.

——— Königliche Centralstelle für die Landwirthschaft. Das landwirthschaftliche Unterrichtswesen für die bauerliche Bevölkerung Württembergs. Anhang: der Katalog für die Wiener Weltausstellung von 1873. 8°. *Stuttgart*, 1873. pp. 47.

——— ——— Ueber die landwirthschaftlichen Verhältnisse des Königreichs Württemberg, nach natürlichen Bezirken; bearbeitet durch v. Paulus und Kull. 8°. *Stuttgart*, 1873.

——— ——— Die Vorstände, Lehrer und Schüler an den Ackerbauschulen Hohenheim, Ellwangen, Ochsenhausen und Kirchberg, der Weinbauschule Weinberg und der Gartenbauschule Hohenheim, aus früherer und jetziger Zeit. 8°. *Stuttgart*, 1873.

——— Unterrichts- und Erziehungswesen im Königreich Württemberg. Statistik im Schuljahr 1872–73. 8°. *Stuttgart*, 1874. pp. 44.

——— Die wichtigeren Gesteine Württembergs. *See* **Wolff,** E.

——— Wohlthätigkeits-Verein im Königreich Württemberg. Jubiläums-Bericht der Centralleitung über ihre Leistungen in den fünfzig Jahren von der Zeit ihrer Gründung, 1817–67. 8°. *Stuttgart*, 1867.

Württembergs Obstbau. Festschrift des pomologischen Instituts in Reutlingen. *See* **Lucas,** E. [*Add.*]

Wurtz, A. Progrès de l'industrie des matières colorantes artificielles. Illus. de soie, de laine, et de coton teints et fabriqués speciellement pour cet ouvrage. 8°. *Paris*, 1876.

Wurtz, Adolphe. Dictionnaire de chimie, pure et appliquée, comprenant la chimie organique et inorganique; la chimie appliquée à l'industrie, à l'agriculture et aux arts; la chimie analytique, la chimie physique, et la minéralogie. T. 1, A–G; 2, H–Sty. 8°. *Paris*, 1868–70.

Digitized by Google

Wurtz, Adolphe. A history of chemical theory, from the age of Lavoisier to the present time. Transl. and edited by Henry Watts. 8°. *London*, 1869.

Wurtz, Adolphe C. An introduction to chemical philosophy according to the modern theories. 12°. *London*, 1867.

Wurtz, Henry. Geometrical chemistry. First, or introductory memoir. (Reprinted from the Amer. Chemist for March, 1876.) 12°. *New York*, 1876.

WÜRZBURG. Polytechnischer Verein. Gemeinnützige Wochenschrift. Hrsg. durch die Direction des Vereins. Jhrg. 1–25, 1851–1875. 8°. *Würzburg*, 1851–75——.

——— Jahres-Bericht des polytechnischen Vereins zu Würzburg über den Stand seines Schulwesens. Jahre 1863–64—1875–76. 4°. *Würzburg*, 1864–76. [From 1867–68, 'Centralverein'; from 1873–74, 'für Unterfranken und Aschaffenburg zu Würzburg'.]

——— Der polytechnische Verein zu Würzburg in den ersten fünfzig Jahren seines Bestehens. Eine Festgabe zur fünfzigjährigen Stiftsungs-Feier. Nach den Akten von M. F. Chemnitz. 4°. *Würzburg*, 1856.

——— Verzeichniss der Kupferstich-Sammlung des polytechnischen Vereins zu Würzburg. 8°. *Würzburg*, 1855. Nachtrag, 1856.

Wüst, Albert. Die Fortschritte im landwirthschaftlichen Maschinenwesen. Jahresbericht der Prüfungsstation für landwirthschaftliche Maschinen und Geräthe zu Halle, etc. 8°. *Leipzig*, 1875.

Wüst, C. Die Einführung der Ketten-Schifffahrt auf dem Neckar. Denkschrift im Namen des Comités verfasst. 4°. *Heilbronn*, 1874.

Wyatt, M. Digby. Illuminating. *See* **Tymms,** W. R.

——— and **Tymms,** W. R. The history, theory and practice of illuminating. 18°. *London*, 1861.

——— and **Waring,** J. B. The Byzantine and Romanesque court in the Crystal palace, described. 8°. *London*, 1854. **Crystal palace library, v. 2.**

——— The Italian court in the Crystal palace, described. 8°. *London*, 1854. **Crystal palace library, v. 2.**

——— The mediæval court in the Crystal palace, described. 8°. *London*, 1854. **Crystal palace library, v. 2.**

Wyatt, M. Digby, and **Waring,** J. B. The renaissance court in the crystal palace, described. 8°. *London*, 1854. **Crystal palace library, v. 2.**

Wyeth, S. D. Description of the Crawford bronze door, with a diagram. 8°. *Washington*, [1869]. pp. 16.

Wylson, James. The mechanical inventor's guide: comprising the laws of motion, the mechanical powers, drums and bells, toothed wheels, and nearly 300 mechanical movements. *Illus.* 12°. *London*, 1859. [?]

Wyman, Jeffries. Anatomy of the nervous system of the rana pipiens. **Smiths'n contrib., v. 5.**

Wyman, Morrill. A practical treatise on ventilation. 12°. *Boston*, 1846.

Wynter, Andrew. Curiosities of civilization. 7th ed. 12°. *London*, 1860.

——— Our social bees. 1st and 2d series. 12°. *London*, 1866–67.

——— Subtle brains and lissom fingers: some of the chisel marks of our industrial and scientific progress; and other papers. 12°. *London*, 1864.

WYOMING, Preliminary report of the United States survey of, 1870. By F. V. Hayden. *See* UNITED STATES. **Interior dept.** Geolog. and geograph. survey.

——— Reconnaissance of northwestern. *See* UNITED STATES. **War department.**

Wythes, Joseph H. The microscopist; a complete manual on the microscope for physicians, students and lovers of natural science. 12°. *Philadelphia*, 1852.

Xylander, J. Étude des armes. 3e éd. Traduit de l'allemand par P. d'Herbelot. *Illus.* 8°. *Paris*, 1847.

YACHT designing. *See* **Kemp,** Dixon.

YACHTS and yacht building. *See* **Marett,** P. R.

Yale lock manufacturing co. Catalogue and price list, No. 6. *Illus.* roy. 8°. *Stamford, Ct.*, 1876.

YARN; amount required in weaving. Berechnung der zur Darstellung eines Gewebes erforderlichen Garnmenge. *See* **Weigert,** S.

YARNS, worsted and carded, A practical treatise on the manufacture of. *See* **Leroux,** Charles.

Yarrell, William. A history of British fishes. 2d ed. *Illus.* 2 v. 8°. *London*, 1841.

Yates, James. Narrative of the origin and formation of the international associa-

Digitized by Google

Yates, James—Continued.
tion for obtaining a uniform decimal system of measures, weights and coins. 8°. *London*, 1856.

Yates, James. Textrinum antiquorum; an account of the art of weaving among the ancients. Part 1. On the raw materials used for weaving. 8°. *London*, 1843.

YEARBOOK of agricultural facts. *See* **Burn**, Robert Scott.

—— of daily recreation and information. *See* **Hone**, William.

—— of photography. *See* **Photographic** news almanac.

—— The statesman's. *See* **Martin**, Frederick.

YEAST. By T. H. Huxley. *See* **Science lectures for the people, series 3.**

—— Hall's distiller; containing directions for making. *See* **Hall**, Harrison.

Yeats, G. D. Observations on the claims of the moderns to some discoveries in chemistry and physiology. 8°. *London*, 1798.

YELLOW fever. *See* **La Roche**, R.

—— —— and epidemic cholera in the army of the United States during the year 1867, Report on. *See* UNITED STATES. **War dept. Surgeon general's office. Circular 1.**

—— —— Lectures on. *See* **Hastings**, John.

YELLOWSTONE national park, Reconnaissance of, 1873. By W. A. Jones. *See* UNITED STATES. **War** department.

—— river, Expedition up the. By J. W. Forsyth and F. D. Grant. *See* UNITED STATES. **War** department.

Yeoman, T. H. Consumption of the lungs; or decline: causes, symptoms, and rational treatment, with means of prevention. Revised by a Boston physician. *Boston and Cambridge*, 1850.

Yeowell, James. Notes and queries; index to series 1st, compiled by. *See* **Notes.**

YESSO coals. *See* **Munroe**, H. S.

—— The gold fields of. *See* **Munroe**, H. S.

YORUBA language, Grammar and dictionary of the. By T. J. Bowen. **Smiths'n contrib., v. 10.**

Youatt, William. Sheep; their breeds, management and diseases; remarks on the sheep of the United States. 8°. *New York*, 1848.

Youatt, William. Über die Krankheiten des Pferdes. *See* **Martin**, W. C. L. Die Geschichte des Pferdes.

—— and **Martin**, W. C. L. Cattle; a treatise on their breeds, management, and diseases; a full history of the various races, forming a guide to the farmer, amateur and veterinary surgeon. Ed. by A. Stevens. 12°. *New York*, 1851.

—— —— The hog: a treatise on the breeds, management, feeding, and medical treatment of swine; with directions for salting pork, and curing bacon and hams. Edited by A. Stevens. 12°. *New York*, 1855.

Youmans, Edward L. Alcohol and the constitution of man, a popular scientific account of the chemical history and properties of alcohol. 18°. *New York*, 1854.

—— Chemical atlas, or the chemistry of familiar objects, accompanied by explanatory essays. *Illus.* 4°. *New York*, 1855.

—— A class book of chemistry; in which the principles of the science are familiarly explained and applied to the arts, agriculture, physiology, etc. 12°. *New York*, 1852.

—— Correlation and conservation of forces. By Grove and others. Introduction and biographical notices. *See* **Grove**, William R.

—— Culture demanded by modern life; a series of addresses and arguments on the claims of scientific education. 12°. *New York*, 1867.

—— Elementos de química, para uso de los colegios y escuelas. Libro que contiene los últimos descubrimientos de la ciencia, y en que se indican sus aplicaciones á las artes, y á la mejor inteligencia de los fenomenos de la naturaleza. Traducido de la última edicion inglesa, par Marco A. Rojas. *Illus.* 12°. *Nueva York*, 1867.

—— Popular science monthly; edited by. *See* **Popular.**

Young, Archibald. Salmon fisheries. *See* **Holdsworth**, E. W. H., and **Young**, Archibald.

Young, Arthur. Nautical dictionary: defining the technical language relative to the building and equipment of sailing vessels and steamers, seamanship, navigation, nautical astronomy, naval gunnery, maritime law and commerce, gen-

Digitized by Google

Young, Arthur—Continued.
eral and particular average, marine insurance, etc.; with appendix containing international regulations for preventing collisions at sea and a vocabulary of French terms. Assisted in the nautical department by James Brisbane. 2d ed. *Illus.* 8°. *London*, 1863.

Young, Augustus. Unity of purpose; or rational analysis; a treatise designed to disclose physical truths, and to detect and expose popular errors. roy. 8°. *Boston*, 1846.

Young, Charles D., **and co.** Compendium of larger catalogue of iron and wire work, in connection with landed property. 8°. *Edinburgh*, 1851. pp. 40.

——— Description of iron and wire fences, gates, etc.; adapted especially for Australia. *Illus.* 4°. pp. 16.

Young, Charles Frederic T. The economy of steam power on common roads; in relation to agriculturists, railway companies, mine and coal owners, quarry proprietors, etc., with its history and practice in Great Britain, and its progress in the United States, by Alexander L. Holley and J. K. Fisher. 8°. *London*, 1860.

——— Fires, fire engines, and fire brigades; with a history of manual and steam fire engines; their construction, use, management, etc. 8°. *London*, 1866.

Young, David. Observations upon fire, with a view to the best and most expeditious methods of extinguishing it, with or without water. 8°. *Edinburgh*, 1784.

Young, J. R. The elements of mechanics, comprehending statics and dynamics, with a collection of mechanical problems. *Illus.* 12°. *London*, 1832.

——— Key to the rudimentary treatise on arithmetic. 12°. *London*, 1853. **Weale's series, No. 84*.**

——— Mechanical philosophy. *See* **Mitchell,** Walter, **Young,** J. R., etc. **Orr's circle of the sciences, v. 9.**

——— Rudimentary treatise on arithmetic. 2d ed. 12°. *London*, 1854. **Weale's series, No. 84.**

——— and others. The mathematical sciences. Arithmetic, algebra and the elements of Euclid, by J. R. Young; Planes, spherical trigonometry, series, logarithms, and mensuration, by J. F. Twisden; Practical geometry, by A. Jardine.

Young, J. R., and others—Continued.
8°. *London*, 1854. **Orr's circle of the sciences, v. 8.**

——— and others. Practical astronomy, navigation, nautical astronomy, and meteorology. 8°. *London*, 1856. **Orr's circle of the sciences, v. 5.**

Young, John. Physical geography. 12°. *New York*, 1873. **Putnam's advanced science series.**

Young, Thomas. Biography. *See* **Arago,** D F. J. Biography of scientific men.

——— A course of lectures on natural philosophy and the mechanical arts. 2 v. 4°. *London*, 1807.

——— Life of. *See* **Peacock,** George.

——— Miscellaneous works of the late. v. 1-2. Including his scientific memoirs, etc. Ed. by George Peacock. v. 3. Hieroglyphical essays and correspondence, etc. Ed. by John Leitch. 8°. *London*, 1855.

Young, William B. The practical interest calculator: a book of interest, etc. 8°. *Cincinnati*, 1850.

Young (The) lady's equestrian manual. 18°. *Philadelphia, New Orleans*, 1839.

——— men's association of Buffalo, Report of the executive committee of. *See* BUFFALO.

——— men's library association, Worcester, Mass. *See* WORCESTER (Mass.).

——— men's mercantile library association, Cincinnati, O. *See* CINCINNATI.

——— (The) tradesman; or book of English trades: a library of the useful arts, for commercial education. 12°. *London*, 1839.

Ysabeau, A. La science des campagnes. [T. 1.] Instruments agricoles, labours, semailles, fenaison, moisson. [T. 2.] Plantes alimentaires et plantes fourragères. 12°. *Paris, n. d.*

Ysabeau, Victor Frédéric Alexandre. Maison rustique. T. 5, publ. par. *See* **Maison.**

Yvart, —. Concours pour les machines hydrauliques, etc. Rapport par. *See* **Challan,** A. D. J. D., and others.

——— Rapport sur des expériences relatives à la charrue de Guillaume. 8°. *Paris*, 1819. pp. 14.

Zachariä. Eduard. Das Luftresonanzwerk an Tasten-Instrumenten (Klavier und Harmonium). Ein erläuterndes Wort über das Wesen und den künstle-

Digitized by Google

Zachariä, Eduard—Continued.
rischen Werth der neuen Einrichtungvon dem Erfinder. *Illus.* 8°. *Wien.* pp. 24.

Zachos, J. C. The phonic text; a method of teaching reading by the signs of sound, without attaining the orthography of language or introducing any new letters. 8°. *Boston,* 1865. pp. 25.

Zaffank, Josef. Militair-Kartographie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 17.**

Zahn, Joannes. Pro practice construendo et elaborando ocu'o artificiali telelioptrico, sive telescopio. Fundamentvm III practico-mechanicum. fol. *Herbipoli,* 1686.

Zamminer, F. Annual report of the progress of chemistry; with the cooperation of. *See* **Liebig,** J. v., and **Kopp,** H.

——— Jahresbericht über die Fortschritte der Chemie unter Mitwirkung v. *See* **Liebig,** J. v., and **Kopp,** H.

——— Jahresbericht über die Fortschritte der Physik für 1857. 8°. *Giessen,* 1858.

——— Die Musik und die musikalischen Instrumente in ihrer Beziehung zu den Gesetzen der Akustik. *Illus.* 8°. *Giessen,* 1855.

Zantedeschi, Francesco. De mutationibus quæ contingunt in spectro solari fixo. Elucubratio. 4°. *München,* 1875. pp. 11. **Abhandlungen der k. bayr. Akademie der W., 2. Cl., 8, Bd., 1. Abth.**

Zapata, Francisco Javier. The chronograph; used to determine more than one velocity in the same trajectory. *See* UNITED STATES. **Navy dept.** Ordnance papers.

Zech, J. Sammlung mathematischer Tafeln, Vermehrt mit den Tafeln von. *See* **Vega,** Georgs von.

Zeitschrift für deutsche Landwirthe. Hrsg. von Ernst Stöckhardt. Jahrg. 11–15. roy. 8°. *Leipzig,* 1860–64.

——— für Fotografie und Stereoskopie. Hrsg. von Karl Josef Kreutzer. B. 1–7, Jahrg. 1860–63. 8°. *Wien,* 1860–63.

Zeitung für Porcellan-, Steingut- und Glasfabrikanten. *See* **Schmidt,** Christian H.

Zell's United States business directory, for 1875; containing classified lists of manufacturers, wholesale traders, jobbers, commission merchants and others, who, from the nature and extent of their re-

Zell's U. S. business directory—Continued.
lations, may have transactions with other cities, or may be called upon with advantage by travellers, agents, etc. Compiled by L. Colange. 8°. *Philadelphia,* 1875. [†]

——— popular encyclopædia. *See* **Colange,** L.

Zeller, C. Landwir hschaftliche Verhältnisz-Kunde. 3 Bde. 8°. *Darmstadt,* 1842.

Zeman, Johann. Webereimaschinen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

——— and **Kohn,** Karl. Spinnereimaschinen, Näh-, Strick- und Stickmaschinen. *See* VIENNA. **Gen.-dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Zerrenner, Carl. Die Braunstein- oder Manganerz-Bergbaue in Deutschland, Frankreich und Spanien. 8°. *Freiberg,* 1861.

Zerrenner, J. F. Der wohlunterrichtete Cur- und Hufschmied. 8°. *Weimar,* 1841. **109 Neuer Schauplatz der Künste.**

Zetzsche, Karl Eduard. Die Copirtelegraphen, die Typendrucktelegraphen und die Doppeltelegraphie. Ein Beitrag zur Geschichte der elektrischen Telegraphie. *Illus.* 8°. *Leipzig,* 1865.

Zeuner, Gustav. Civilingenieur; hrsg. v. *See* **Civilingenieur.**

——— Das Locomotiven-Blasrohr. Experimentelle und theoretische Untersuchungen über die Zugerzeugung durch Dampfstrahlen und über die saugende Wirkung der Flüssigkeitsstrahlen überhaupt. *Illus.* 8°. *Zürich,* 1863.

——— Die Schiebersteuerungen. Mit besonderer Berücksichtigung der Steuerungen bei Locomotiven. *Illus.* 8°. *Freiberg,* 1858.

——— Same. 4te Aufl. *Illus.* 8°. *Leipzig,* 1874.

——— Treatise on valve-gears; with special consideration of the link-motions of locomotive engines. 3d ed. Transl. from the German by Moritz Müller. 8°. *London,* 1869.

——— Über das Wanken der Locomotiven. *Illus.* 4°. *Zürich,* 1861. pp. 23.

Ziegler, Geo. J. Researches on the medical properties and applications of nitrous oxide; protoxide of nitrogen or laughing gas. 8°. *Philadelphia,* 1865.

Digitized by Google

Zierl, Lorenz. Kunst- und Gewerbe-Blatt; red. v. *See* MUNICH. **Polytechn. Verein.**

Zimmermann, W. F. A. Elektricität, Magnetismus, Galvanismus. Was wissen wir bis jetzt darüber, etc. *Illus.* 8°. *Berlin*, 1856. B. 1, Handbuch der Physik.

ZINC, Burnettizing by the use of chloride of, etc. *See* **Burnettizing.**

——— plating. Die Kunst des Vergoldens, Verzinkens, etc. *See* **Schmidt,** Christian H. **131 Neuer Schauplatz der Künste.**

——— roofing. A description of the latest and most approved systems of zinc roofing. 8°. *New York*, 1850. pp. 40.

——— working. **British manufacturing industries, v. 1.** [*Add.*]

——— Zinkguss-Ornamente, etc. *See* **Geiss,** Moritz.

ZINCOGRAPHY. Das Ganze des Steindrucks; nebst einem Anhange von der Zinkographie. *See* **Pescheck,** H. E. **43 Neuer Schauplatz der Künste.**

Zinner, Emerich. Pionnier-Wesen. Brücken- und Land-Communication. Telegraphen-Leitungen. Wasser- und Lagerbau. *See* °VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

Zirkel, Ferdinand. Microscopical petrography. Report. *See* UNITED STATES. **War** department.

Ziron d'Airoles, Jules de. Notice pomologique. Variétés du poirier, anciennes, modernes, et nouvelles. 8°. *Paris*, 1859.

ZODIAC, Mechanical. *See* **Townsend,** Charles E. [*Add.*]

Zoéga, —. Manuel du fabricant et du raffineur de sucre. *See* **Blachette** and **Zoéga. 123 Manuels Roret.**

Zollverein. Catalog der gewerblichen Ausstellung, 1862. *See* GERMANY. **Zollverein.**

——— Catalogue of the Zollverein department, 1862. *See* GERMANY. **Zollverein.**

Zonca, Vittorio. Novo teatro di machine et edificii. Per uarie et sicure operationi. Cõ le loro figure tagliate in rame e la dichiaratione, e dimostratione di ciascuna. Opera necessaria ad architetti, et a quelli, cẽ di tale studio si dilettano. 4°. *Padoua*, 1607.

ZOOLOGISTS, Biography of. *See* **Swainson, W. Lardner's cabinet cyclopædia, v. 122.**

ZOOLOGY. *See, also,* **Natural** history.

——— Abhandlungen des zoologisch-mineralogischen Vereines. *See* REGENSBURG.

——— Alphabet of. *See* **Rennie,** James.

——— and Cuvier. *See* **Cuvier** and zoology.

——— Bericht über die österreichische Literatur der Zoologie, etc. *See* VIENNA.

——— by R. Owen. *See* **Herschel,** J. F. W. Manual of scientific enquiry.

——— Class book of. *See* **Jaeger,** B.

——— Correspondenz-Blatt des zoologisch-mineralogischen Vereines. *See* REGENSBURG.

——— Elements of. *See* **Carpenter,** Philip.

——— Four lectures on. By T. Alcock. **Science lectures for the people, series 1.**

——— Die Geschichte des Pferdes, seine Varietäten und Stammverwandten. *See* **Martin,** W. C. L.

——— in the Crystal palace, by E. Forbes. *See* **Latham,** R. G.

——— Natural history of animals, by W. S. Dallas. *See* **Smith,** E. **Orr's circle of the sciences, v. 2, 3.**

——— Principles of. *See* **Agassiz,** Louis, and **Gould,** A. A.

——— Verhandlungen der k. k. zoologisch-botanischen Gesellschaft. *See* VIENNA.

——— Vorschule der Thierkunde. *See* **Vorschule.**

Zoonomia; or the laws of organic life. *See* **Darwin,** Erasmus.

ZOOPHYTES. Die Zoophyten und Echinodermen des adriatischen Meeres. *See* **Heller,** Cam.

Zorès, Ch. Ferdinand. Recueil de fers spéciaux, des expériences faites sur leur résistance, et de leurs diverses applications dans les constructions. fol. *Paris, n. d.*

Zuchold, Ernst Amandus. Bibliotheca photographica. Verzeichniss der auf dem Gebiete der Photographie, sowie der damit verwandten Künste und Wissenschaften seit Erfindung der Daguerreotypie bis zu Anfang des Jahres 1860 erschienenen Schriften. 8°. *Leipzig*, 1860. pp. 28.

Zürcher, —, and **Margolle,** —. Meteors, aerolites, storms, and atmospheric phenomena. Transl. by William Lack-

Digitized by Google

Zürcher and **Margolle**—Continued.
land. *New-York*, 1870. **Illustrated library of wonders, v. 19.**

ZURICH. Naturforschende Gesellschaft. Vierteljahrsschrift. Mittheilungen über Sonnenflecken, über Sternschnuppen und Feuerkugeln. *See* **Wolf**, Rudolf.

——— Verzeichniss der Bibliothek des schweizerischen Polytechnikums. 8°. *Zürich*, 1857.

ZWÄTZEN. Landwirthschaftlicher Hauptverein. Berichte über das landwirthschaftliche Vereinsleben im zweiten Verwaltungsbezirke des Groszherzogthums Sachsen-Weimar-Eisenach in den Jahren 1857–61. 8°. *Jena*, 1862.

Zwiauer, Peter. Spritzen und Pumpen. *See* VIENNA. **Gen.-Dir. der Weltausst 1873. Bericht. Gruppe 13.**

Digitized by Google

Digitized by Google

ADDITIONS.

[To April 30, 1878.]

Abbass, F. W. Handbuch der gesammten Metallwaarenfabrikation; bearbeitet von. In 3 Theilen. 1er Theil. Enthaltend die Fabrikationsweisen der Waaren von Schmiede-Eisen, Guss-Eisen, Stahl, Weiss- und Zinkblech, Zinkguss, Zinn, Zinnkomposition und verzinnter Waaren. 2ter Theil. Enthaltend die Fabrikationsweisen der Waaren von Kupfer, Messing, Tombak, Talmigold, Bronce oder Rothguss, Neusilber und Aluminium, vergoldeter, versilberter, vernickelter u. s. w. Waaren, sowie neuer und verbesserter Maschinen und Werkzeuge. Mit Atlas. 8°. *Weimar*, 1876–78. **47, 48 Neuer Schauplatz der Künste und Handwerke.**

Abbott, Francis. Results of twenty-five years' meteorological observations for Hobart Town; together with a two years' register of the principal atmospheric meteors and aurora australis; with a meteorological summary for Adelaide, Melbourne, Sydney, Auckland, etc. 4°. *Tasmania*, 1866.

—— Results of thirty years' meteorological observations for Hobart Town. 4°. *Tasmania*, 1872.

Abel, F. A. Researches on explosives. *See* **Noble,** and **Abel,** F. A.

Account (An) of some German volcanoes, etc. 12°. [*London.*] *n. t. p.*

Accum, Frederick. A practical essay on chemical re-agents or tests. Illustrated by experiments. 18°. *Philadelphia*, 1817.

—— A practical essay on the analysis of minerals, exemplifying the best methods of analysing ores, earths, stones, inflammable fossils and minerals in general. 1st Amer. ed. 18°. *Philadelphia*, 1809.

ACIDS. British manufacturing industries, v. 4.

—— Chemical technology; acids, alkalies and salts. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

Ackermann, R. Upholsterer and cabinetmaker's repository; designs of modern and fashionable furniture; viz: curtains, draperies, beds, chairs, etc., drawn by various artists from real furniture. sm. 4°. *London.*

Adair, D. L. A new system of bee keeping, adapted to the habits and characters of the honey-bee; with descriptions of, and directions for managing bees in the section bee hive; embracing, also, improved methods of artificial swarming. 8°. *Cincinnati*, 1867.

Adams, W. H. Davenport. Lighthouses and lightships; a description and historical account of their mode of construction and organization. *Illus.* 12°. *New York*, 1870. **Illustrated library of wonders, v. 18.**

Adamson, W. Discovery of a universal principle for dividing the circumference of a circle, or any part of it, into a given number of equal parts, by a new instrument called cyclometer. 8°. *London*, 1815.

Adler, Heinrich. Oculistische Instrumente. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

ADULTERATION of wine. La sophistication des vins. *See* **Gautier,** E. J. Armand.

ADVERTISING, History of. *See* **Sampson,** Henry.

Aereon, or flying-ship, invented by Solomon Andrews. 8°. *New York*, 1866. pp. 16. [Cover title.]

AERONAUTICS. Aereon, or flying-ship; invented by S. Andrews. *See* **Aereon.**

—— Aerial navigation. *See* **Porter,** Rufus.

—— L'ariation, ou navigation aérienne. *See* **Seguin** *aîné.*

—— Navigation aérienne. *See* **Pascal,** C.

Digitized by Google

Agassiz, Louis J. R. Types of mankind: contributions by. *See* **Nott,** J. C., and **Gliddon,** George R.

——— and Elizabeth A journey in Brazil. 8°. *Boston,* 1868.

AGRICULTURAL chemistry and geology, Elements of. *See* **Johnston,** James F. W.

——— ——— Catechism of. *See* **Johnston,** James F. W.

——— ——— Chemistry of the farm and sea. *See* **Nichols,** James R.

——— ——— Die landwirthschaftlich-chemische Versuchsstation Hohenheim. *See* **Wolff,** E.

——— congress. Landwirthschaftlicher Congress, 1849, zu Wien. *See* VIENNA. **Congress.**

——— engineering. Handbuch des landwirthschaftlichen Wasserbaues. *See* **Perels,** Emil.

——— exhibition. Concours agricole universal de 1856. *See* PARIS.

——— implements. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 23.**

——— ——— Catalogue of Pennsylvania agricultural works. *See* **Farquhar,** Arthur B.

——— ——— Landwirthschaftliche Geräthe und Maschinen. Von A. Adam Schmied. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 2, 12.**

——— ——— Die landwirthschaftlichen Maschinen und Geräthe. *Paris,* 1867. *See* **Perels,** Emil.

——— instructions for those who may emigrate to Brazil. *See* **Moreira,** N. J.

——— machinery. **British manufacturing industries, v. 10.**

——— machines. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 23.**

AGRICULTURE. Annali d'agricoltura e giardiniere. *See* MILAN.

——— Anwendung der Rechnungskunst auf die Landwirthschaft. *See* **Anwendung.**

——— Bonitirung des Bodens vermittelst wildwachsender Pflanzen. *See* **Trommer,** C.

——— Department of; its history and objects. *See* **Swank,** J. M.

——— The farm; a pocket manual of practical agriculture. *See* **Farm.**

——— Farming as a profession. *See* **Bland,** T. A.

AGRICULTURE. Five acres too much. *See* **Roosevelt,** R. B.

——— French. Annales de l'agriculture française. *See* **Londet** and **Bouchard.**

——— History of the arts and sciences of the antients. *See* **Rollins,** Charles.

——— in the Netherlands. Verslag van den landbouw in Nederland. *See* **Verslag.**

——— Landwirthschaftliche Erfahrungen, etc. *See* **Block,** Albrecht.

——— Landwirthschaftliche Lehre und Forschung. Von C. Theodor von Gohren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— Landwirthschaftliche Pflanzenproduction. *See* **Henneberg, W.**

——— Landwirthschaftliches Centralblatt. *See* BADEN.

——— Landwirthschaftliches Centralblatt für Deutschland. *See* **Landwirthschaftliches.**

——— Magazijn voor landbouw en kruidkunde. *See* **Ballot,** J. C.

——— Notes on North America; agricultural, etc. *See* **Johnston,** J. F. W.

——— The ploughman. *See* **Guide** to trade.

——— Principles of science applied to. *See* **Potter,** Alonzo.

——— Schwerz's landwirthschaftlicher Nachlass. *See* **Schwerz,** Johann Nepomuck.

——— The southern cultivator. *See* **Southern.**

——— Traité d'arpentage et de nivellement, à l'usage des agriculteurs. *See* **Leclerc,** J., and **Toussaint,** J.

Aikens, A, Tables of interest and of discount, at six and seven per cent; with a tablet, which, used together, show the interest on all sums of money whatever, from one mill upwards, for all periods of time, from one day to ten years; and the discount at both these rates per cent. on all sums from one mill to one million of dollars. 4°. *New York,* 1847.

Ainstie, Francis Edmund. On diseases of the spine, etc. *See* **Radcliffe,** C. B., and others. **Medical news lectures, v. 4.**

AIR. Beziehungen der Luft zu Kleidung, Wohnung und Boden. *See* **Pettenkofer,** Max.

——— machines, Compressed. Luftcompressions- und Gesteinsbohr-Maschinen. A. Riedler. *See* PHILADELPHIA, etc. **Be-**

Digitized by Google

AIR—Continued.
richt Oesterr. Comm. Weltausst. 1876. Heft 15.

—— pumps, Description of. *See* **Boye, M. H. Treatise** on pneumatics.

Airy, G. B. Determination of the longitude of Valentia in Ireland by transmission of chronometers. [Forming the appendix to the Greenwich astronomical observations, 1845.] 4°. [*London*, 1846.]

Aitken, W. C. Guns, nails, locks, woodscrews, pins, saddlery, electroplate, etc. **British manufacturing industries, v. 3.**

ALCOHOL, manufacture of, Report on. By H. F. Q. D'Aligny. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

—— On. *See* **Richardson, B. W.**

ALCOHOLIC liquors, Manufacture and distillation of. *See* **Duplais** *aîné et jeune.*

—— —— Practischer Wegweiser zur Spiritus-Fabrikation. *See* **Gumbinner, L.**

ALCOHOLOMETRY. L'ébullioscope alcoométrique. *See* **Brossard-Vidal.**

ALGEBRA, An elementary. *See* **Venable, C. S.**

ALGEBRAIC problems, Method for solving. *See* **Vose,** George L. **Van Nostrand's science series, No. 16.**

ALGIERS. Gouvernement général de l'Algérie. L'Algérie à l'exposition universelle de Londres, 1862. 8°. *Alger, n. d*

ALKALIES. British manufacturing industries, v. 4.

—— Die Alkalien. *See* **Pick,** S.

—— Chemical technology; acids, alkalies, and salts. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

Allan, W. Theory of arches. *Illus.* 18°. *New York*, 1874. **Van Nostrand's science series, v. 11.**

Allen, De Witt C. Digest of flour and middlings separators and purifiers, including processes for manufacturing flour. 12°. *New York*, 1873.

Allen, Horatio. Astronomy in its general facts and relations, taught by aid of mechanical presentation and illustration. Parts 1, 2, 3. 12°. *New York*, 1877.

Allen, Joel Asaph, a d **Coues,** Elliott. Monographs of the North American rodentia. *See* UNITED STATES. **Interior dept. Geolog. and geograph. survey. F. V. Hayden. v. 11.**

Allen, Nathan. The opium trade; including a sketch of its history, extent, effects etc., as carried on in India and China. 8°. *Lowell*, 1853.

Allen, Thomas R. Bee cultivator; embracing the natural history, physiology, and management of the honey bee. 18°. *Syracuse, N. Y.*, 1846.

Allen, W. Strength of beams and transverse loads. *Illus.* 18°. *New York*, 1875. **Van Nostrand's science series, No. 19.**

Allyn, J. M. The natural alphabet for the representation, with types or pen, of all langnages. 4°. *Blue Anchor*, 1867.

ALMANAC, An American. *See* **Spofford,** Ainsworth R.

ALMANACS. Pugh's Queensland almanac for 1876. *See* **Pugh.**

ALPHABET for all langnages. *See* **Allyn,** J. M.

Althaus, E., **Bach,** L., **Hartmann,** J., **Heusinger von Waldegg,** E., et autres. Dictionnaire technologique, français-allemand-anglais; contenant les termes techniques employés dans les arts et métiers, l'architecture civile, militaire et navale, les ponts et chaussées et les chemins de fer, la mécanique, la construction des machines, l'artillerie, la navigation, les mines et les usines, les mathématiques, la physique, la chimie, la minéralogie, etc.; précédé d'une préface par Charles Karmarsch. 4°. *Wiesbade*, 1868.

AMERICA, Silk industry in. *See* **Silk** association of America.

American (The) architect and building news. v. 1–2. [v. 1 is for 1876; v. 2, 1877.] 4°. *Boston*, 1876–77——.

—— (The) bookseller; a semi-monthly journal devoted to the interests of the book, stationery, news, and music trades, and general literature: with which is incorporated the American bookseller's guide, and the Index. v. 4, 1877. 8°. *New York*, 1877.

American (The) card-player. Containing clear and comprehensive directions for playing the games of euchre, whist, béziquo, all fours, pitch, French fours, all-fives, casino, cribbage, straight and draw poker, and whiskey poker; together with all the laws of the games. 18°. *New York*, 1866.

Digitized by Google

AMERICAN history. American archives. *See* UNITED STATES. **Congress.**

—— institute of homœopathy. Transactions of 20th session held in New York, June 4–7, 1867. New series, v. 1, No. 1. 8°. *Boston*, 1868.

—— journal of education. German universities; reprinted from. *See* **Raumer**, Carl von.

—— (The) journal of microscopy and popular science. v. 1. [Dec., 1875–Nov., 1876.] 8°. *New York*, 1876——.

—— manufacturer and iron world. v. 19–21. 1876–77. fol. *Pittsburgh*, 1876–77——.

—— pomological society. Proceedings of the sessions. 8° and 4°. *Philadelphia, Boston, Rochester, etc*, 1852–75.

—— society of civil engineers. Incorporated 1852. Transactions. v. 1–6. 1872–77. [Proceedings bound with the vols. from v. 2.] 8°. *New York*, 1872–77——.

Amouroux, —. The practical draughtsman's book. *See* **Armengaud** *aîné*, **Armengaud** *jeune*, and **Amouroux.**

AMSTERDAM. Maatschappij voor Grond-Krediet. Droogmaking van het Zuidelijk gedeelte der Zuiderzee. Versameling van officielle Bescheiden uitgegeven door de Nederlandsche Maatschappij voor Grond-Krediet. 4°. *Amsterdam*, 1868.

—— Vereeniging voor de Statistiek. Staatkundig en Staathuishoudkundig Jaarboekje voor 1868, 1870, 1872. Door de Vereeniging voor de Statistiek in Nederland. D. 1–3. 12°. *Amsterdam*, 1870–72.

ANÆSTHESIA. A manual of etherization, etc. *See* **Jackson**, Charles T.

ANATOMY, Comparative; medical and physical researches, etc. *See* **Harlan**, R.

—— Elements of human. *See* **Richardson**, T. G.

—— Manual of dissection. *See* **Holden**, Luther.

—— Preparations, etc., in section of human anatomy, United States Army medical museum, exhibited, Philadelphia, 1876. *See* UNITED STATES. **War** dept. Surgeon-general's office.

—— Textbook of practical. *See* **Harrison**, Robert.

—— Wonders of the human body. *See* **Le Pileur, A. Illustrated library of wonders, v. 17.**

Ancient (The) vessel, found in the parish of Tune, Norway. 4°. *Christiania*, 1872. pp. 6.

ANCOATS. Manchester free libraries. Catalogue of the Ancoats lending branch. *See* MANCHESTER.

Anderson, McCall. On the treatment of diseases of the skin, with an analysis of eleven thousand consecutive cases. 8°. *Philadelphia*, 1873. **Medical news lectures, v. 5.**

Anderson, R. B. Handbook for charcoal-burners; transl. by. *See* **Svedelius**, G.

Andrews, Solomon. Aereon, or flying-ship, invented by. *See* **Aereon.**

Andrews, Stephen P., and **Boyle**, A. F. The phonographic reporter's first book. 12°. *New York*, 1848.

ANGLING. A practical guide to bottom fishing, etc. *See* **Burgess**, J. T.

Aneroid, (The) barometer; its construction and use. Compiled from several sources. 18°. *New York*, 1878. **Van Nostrand's science series, No. 35.**

ANIMAL charcoal, Manufacture and revivification of. *See* **Leon**, John A. Art of manufacturing and refining sugar.

—— products. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 4.**

—— resources of the United States. Philadelphia exhibition, 1876. By G. B. Goode. *See* UNITED STATES. **Interior dept. Nat. museum. Bulletin 6.**

Amsted, David T. The gold-seeker's manual; being a guide to the gold regions of California, etc. 18°. *New York*, 1849.

Anstie, Francis E. Neuralgia and the diseases that resemble it. 12°. *New York*, 1872.

Anthracite coal and health. *See* **Derby**, George.

Anthropological institute of Great Britain and Ireland, Journal of. *See* **Journal.**

Antiquarian (The) itinerary; comprising specimens of architecture, monastic, castellated and domestic; with other vestiges of antiquity in Great Britain. Accompanied with descriptions. v. 1–7. 12°. *London*, 1816.

ANTIQUITIES. Arts and sciences of the antients. *See* **Rollin**, Charles.

—— Catalogue of books on. *See* **Pollen**, J. H.

Digitized by Google

ANTIQUITIES, English. Old England. *See* **Knight**, Charles.

—— Mycenæ and Tiryns, Discoveries at. *See* **Schliemann**, Henry.

Anwendung der Rechnungskunst auf die Landwirthschaft. Für Schulen und zum Selbstunterricht. 16°. *Schrobenhausen*, 1861.

APPARATUS for chemistry and pharmacy. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 3.**

—— Handbook of scientific. *See* LONDON. **South Kensington museum science handbooks.**

—— Hunting. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 16.**

—— used in sewing, making clothing, lace, ornamental objects, pins. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 19.**

Appleton's annual cyclopædia, General index to. *See* **General** index.

APPRAISEMENT. Die Bonitirung des Bodens. *See* **Trommer**, C.

AQUEDUCTS. Apparate und Anlagen von Wasserleitungen. Von C. Frischauf. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 18.**

—— Wasserleitung, Canalisation und Rieselfelder. *See* DANTZIC.

ARABIC literature. Codicum Arabicorum in bibliotheca Bataviae catalogus. *See* BATAVIA.

ARCH, Elements of stability in the. *See* **Woodbury**, D. P. UNITED STATES. **War dept. Papers on pract. eng., No. 7.**

ARCHÆOLOGY. Prehistoric use of iron and steel. *See* **Day**, St. John V.

Archer, *Prof.* Paper. **British manufacturing industries, v. 8.**

—— Wool and its applications. **British manufacturing industries, v. 5.**

ARCHES, etc. Form und Stärke gewölbter Bogen und Kuppeln. *See* **Hagen**, G.

—— skew, Methods of construction of. *See* **Hyde**, E. W. **Van Nostrand's science series, No. 15.**

—— Theory of. *See* **Allen**, W. **Van Nostrand's science series, No. 11.**

—— Voussoir. *See* **Cain**, William. **Van Nostrand's science series, No. 12.**

ARCHITECTURAL modelling in paper *See* **Richards**, T. A. **Weale's series, No. 127.**

Architectural (The) review and American builders' journal. By Samuel Sloan, architect. v. 1. imp. 8°. *Philadelphia*, 1869.

ARCHITECTURE. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 26.**

—— The American architect. *See* **American.**

—— Architectur und œffentliche Bauten. Anton Poschacher. *See* PHILADELPHIA, etc. **Bericht Oest. Comm. Weltausst. 1876. Heft 14.**

—— The architectural review. *See* **Architectural.**

—— Arts and sciences of the antients. *See* **Rollin**, Charles.

—— Catalogue of books on. *See* **Pollen**, J. H.

—— Chapel and church. *See* **Bowler**, George.

—— Dictionnaire raisonné d'architecture. *See* **Bosc**, Ernest.

—— Discourses on. *See* **Viollet Le Duc**, E. M.

—— The Englishman's house. *See* **Richardson**, J. C.

—— Etchings of ancient ornamental, etc. *See* **Tatham**, C. Heathcote.

—— Etchings of Grecian and Roman architectural ornament. *See* **Tatham**, C. Heathcote.

—— Examples of iron, brick, and trussed bridges, etc. *See* **Dempsey**, G.

—— for general students. *See* **Horton**, Caroline W.

—— History of the modern styles of. *See* **Fergusson**, James.

—— Hochbau-Constructionen in Eisen, etc. *See* **Klasen**, Ludwig.

—— Report on. By N. L. Derby. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

—— Report on. By W. Watson. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 3.**

—— Revue générale de l'architecture et des travaux publics. Journal des architectes, etc. *See* **Daly**, C.

—— Supplement to a catalogue containing plans in perspective. *See* **Randall**, G. P.

—— Wonders of. *See* **Lefebre**, M. **Illustrated library of wonders, v. 15.**

—— Working drawings in village and farm cottages. *See* **Cleveland**, H. W., and others.

Digitized by Google

ARITHMETIC, Analysis of. *See* **Bellows**, C. F. R.

—— Anwendung der Rechnungskunst auf die Landwirthschaft. *See* **Anwendung.**

—— The Columbia calculator. *See* **Ticknor**, Almon.

—— Decimal system of numbers. *See* **Colburn**, D. P.

—— The national. *See* **Greenleaf**, Benjamin.

—— The speedy calculator. *See* **Naylor**, B.

ARKANSAS. Industrial university. First report of, with a normal department therein. Located at Fayetteville, Washington co., Ark. Organized Sept. 18, 1871? 8°. *Little Rock*, 1873.

Arkwright, Richard. Disproval of Sir R. Arkwright's claim to the invention of the machinery of the cotton manufacture. *See* **Guest**, Richard.

ARMAMENT and artillery. Allgemeine Bewaffnung und Artilleriewesen. Von G. Semrad und J. Sterbenz. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Gruppe 16.**

Arman, L. Constructions navales. Système bois et fer. Note à l'occasion de l'exposition universelle de 1855. 4°. *Paris*, 1855.

Armengaud *aîné*, **Armengaud** *jeune*, and **Amouroux.** The practical draughtsman's book of industrial design; forming a complete course of mechanical, engineering and architectural drawing. Transl. from the French, rewritten and arranged with additional matter and plates, selections from and examples of the most useful mechanism of the day, by William Johnson. 4°. *London*, 1853.

ARMOR, Report on materials for defensive. *See* UNITED STATES. **War dept. Professional papers for practical engineering, No. 17.**

ARMY in relation to trade and industry. Das Heerwesen in Beziehungen zu Gewerbe und Industrie. Von R. B. Potier des Echelles. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

AROMATIC waters, tinctures, etc. Manufacture and distillation of alcoholic liquors. *See* **Duplais** *aîné et jeune.*

Arrowsmith, James. The paperhanger's companion: a treatise on paper hanging, in which the practical operations of the trade are systematically laid down; with copious directions preparatory to papering; preparations against the effect of damp on walls; the various cements and pastes adapted to the several purposes of the trade; observations and directions for panelling and ornamenting rooms, etc. 8°. *Philadelphia*, 1856.

ART and artists. *See* **Haskins**, R. W.

—— and trade, Historic. Objecte der Kunst und Gewerbe früherer Zeiten. Von Carl Lind. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 24.**

—— Catalogue of books on. *See* **Pollen**, J. H.

—— Decorative arts, ecclesiastical and civil, of the middle ages. *See* **Shaw**, Henry.

—— Decorative; as applied to the new houses of parliament. *See* **Hunt**, F. Knight.

—— Furniture and woodwork, ancient and modern. *See* **Maskell**, William. **South Kensington museum art and science handbooks, No. 3.**

—— Illuminated ornaments, from manuscripts and books of the middle ages. *See* **Shaw**, Henry.

—— industry. Die Kunst im Gewerbe. *See* **Oppley**, Edwin.

—— in ornament and dress. *See* **Blanc**, Charles.

—— in the house. *See* **Loftie**, W. J.

—— Kunst und Kunstgewerbe auf der Wiener Weltausstellung, 1873. *See* **Lützow**, Carl von.

—— Kunstgewerblicher Unterricht in Italien. *See* **Ilg**, Albert.

—— Lecture on. *See* **Dwight**, M. A.

—— A manual of design. *See* **Redgrave**, Richard. **South Kensington museum art and science handbooks, No. 6.**

—— (The) of drawing and painting in water colors; wherein the principles of drawing are laid down after a natural and easy manner; with instructions for preparing, mixing and managing all sorts of water colors used in painting. New ed. 18°. *Dublin*, 1768.

Digitized by Google

ART, Persian. *See* **Smith**, R. Murdock. **South Kensington museum art and science handbooks, No. 7.**

—— Report on governmental patronage of. By E. M. Gallaudet. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

—— Schools and masters of painting. *See* **Radcliffe**, A. G.

—— Specimens of ancient furniture. *See* **Shaw**, Henry.

—— Studies in design. *See* **Dresser**, C.

—— Wonders of Italian. *See* **Viardot**, Louis. **Illus. library of wonders, v. 2.**

—— workmanship. A monthly magazine of design to illustrate the masterworks of all periods. 1 v. fol. *London, n. d.*

—— —— Das Kunst-Handwerk. *See* **Bucher**, B., and **Gnaukh**, A.

—— —— Kunst in den Gewerken. *See* HANOVER.

Artisan (The) and the Scientific artisan. *See* **Scientific.**

Artist's (The) repository and drawing magazine; exhibiting the principles of the polite arts in their various branches. v. 1–3. 12°. *London, n. d.*

ARTS and manufactures, Geology in its relation to. *See* **Page**, David.

—— and sciences. Magazijn van Voorschriften. *See* **Meijlink**, B.

—— The artist's repository. *See* **Artist's.**

—— Domestic and mechanic. The principles of science applied. *See* **Potter**, Alonzo.

—— the fine, applied to the useful, Report on. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 1.**

—— Handbuch der bildenden und gewerblichen Künste. *See* **Demmin**, August.

—— History and practice of the fine and ornamental. *See* **Scott**, William B.

—— History of the arts and sciences of the antients. *See* **Rollin**, Charles.

—— The industrial arts. *See* **M[askell]**, W[illiam]. **South Kensington museum art and science handbooks, No. 8.**

—— industrial, Chefs-d'œuvre of the; pottery and porcelain, glass, enamel, metal, goldsmith's work, jewellery, and tapestry. *See* **Burty**, Philippe.

—— —— Historical sketches. *See* **M[askell]**, W[illiam]. **South Kensington museum art and science handbooks, No. 8.**

ARTS, Industrial. Die Kunst-Industrie auf der Wiener Weltausstellung, 1873. *See* **Falke**, Jacob.

—— —— Report on machinery and processes of. By F. A. P. Barnard. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 3.**

—— Journal of the society of. *See* LONDON. **Society** of arts.

—— London journal of arts and sciences. *See* **London** journal.

—— Transactions of society for encouragement of. *See* LONDON. **Society.**

Ascherson, P. Botanischer Verein Brandenburgs. Verhandlungen, red. v. *See* BERLIN.

ASHBY coal field, A collection of geological facts to elucidate the formation of the. *See* **Mammatt**, Edward.

Ashton, Fredrick T. The theory and practice of the art of designing fancy cotton and woollen cloths from sample. Giving full instructions for reducing drafts, as well as the methods of spooling and making out harness for cross drafts, and finding any required reed: with calculations and tables for yarns. *Illus.* l. 4°. *Philadelphia and London*, 1874.

ASPHALT and bitumen, as applied in construction. By A. Beckwith. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

—— Cement of Seyssel; or, asphaltic mastic. *See* **Simms**, F. W.

ASSAYING, fining, refining, and inlarging the bodies of confined metals. *See* **Pettus**, *Sir* John.

ASSOCIATIONS. Allgemeine Bildungsmittel. Vereinswesen. Von Carl T. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

—— Industrial and commercial. Influenza delle associazioni industriali e commerciale sulla prosperità pubblica, etc. *See* **Restelli**, F.

ASTROLOGY. The influence of the sun and moon upon human bodies. *See* **Mead**, Richard.

ASTRONOMICAL instruments. Astronomische Instrumente. Von W. Tinter. VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

ASTRONOMY and geodesy, Contributions to. *See* **Maclear**, Thomas.

Digitized by Google

ASTRONOMY. Improved planisphere of the starry heavens. *See* **Whitall,** H., and **Davis,** J.

——— in its general facts and relations. *See* **Allen,** Horatio.

——— The mechanical zodiac. *See* **Townsend,** C. E.

——— Mouvements des corps célestes. *See* **Robert,** Henri.

——— A system of. *See* **Emerson,** William.

——— Tables useful in practical. By J. T. Lee. *See* UNITED STATES. **War dept. Prof. papers pract. eng., No. 13.**

——— Über die Sonnenflecken. *See* **Wolf,** Rudolf.

ATHENÆUM, Boston. Catalogue of the library. *See* BOSTON.

Athenæum (The); journal of literature, science, the fine arts, music, and the drama. 61 v., 1832–77. [1836, 1839–42, missing; 1 v. a year to 1857; from 1858, 2 v. a year; before 1869, entitled simply Journal of literature, science, and fine arts.] 4°. *London,* 1832–77———.

Atkinson, J. J. Friction of air in mines. 18°. *New York,* 1875. **Van Nostrand's science series, No. 14.**

——— A practical treatise on the gases met with in coal mines. 18°. *New York,* 1875. **Van Nostrand's science series, No. 13.**

Atkinson, W. P. Classical and scientific studies, and the great schools of England; a lecture read before the society of arts, of the Massachusetts institute of technology, April 6, 1865; with additions and an appendix. 8°. *Cambridge,* 1865.

ATLAS, The explanatory Bible, and Scripture gazetteer. *See* **Jenks,** William.

——— Mercator's historia mundi. *See* **Hondy,** Iudocus.

——— The national, of historical, commercial and political geography. *See* **Johnston,** A. K.

——— A new universal, of the world. *See* **Mitchell.**

——— A new universal, of the world. *See* **Tanner,** H. S.

——— of modern geography, The royal. *See* **Johnston,** A. K.

——— of the United States of North America. *See* **Rogers,** H. D., and **Johnston,** A. K.

——— of the world. *See* **Colton,** G. W., and **Fisher,** R. S.

ATLAS of the world, A new universal. *See* **Mitchell.**

——— of the world, A new universal. *See* **Tanner,** H. S.

ATMOSPHERE. Les mouvements de l'atmosphère. *See* **Guldberg,** C. M., and **Mohn,** H.

——— A short treatise upon atmospheric phenomena. *See* **Rucker,** J. M.

ATTORNEYS-general, Digest of opinions of the. *See* UNITED STATES. **Department** of Justice.

Auchincloss, William S. Report on steam-engineering. *See* UNITED STATES. **State dept. Reports Paris exp. 1867. v. 4.**

Audibran, Joseph. Traité historique et pratique sur les dents artificielles incorruptibles, contenant les procédés de fabrication et d'application. 8°. *Paris,* 1821.

AUSCULTATION and percussion. *See* **Barth,** M., and **Roger,** M. H.

AUSTRALIA. An essay on New South Wales. *See* **Reid,** G. H.

——— Melbourne official record. *See* VICTORIA. LONDON. **Internat. exhib. 1873.**

——— Pugh's Queensland almanac, for 1876. *See* **Pugh.**

——— Victorian international exhibition, 1876. *See* VICTORIA.

Austin's measurement tables complete for every description of square cornered lumber. [3 large cardboard sheets.] *Chicago,* 1863.

AUSTRIA. Central-Anstalt für Meteorologie, etc. Übersichten der Witterung in Österreich und einigen auswärtigen Stationen. 1856–67. 4°. *Wien,* 1858–69.

——— Oberösterreichischer Landes-Ausschuss. Rechenschafts-Bericht. Erstattet zur 4. Session. 8°. *Linz,* 1865.

——— K. K. Privilegien-Archiv. Catalog der [ein]registrirten ertheilten, verlängerten, übertragenen und ausser Kraft getretenen ausschliessenden Privilegien. Jahre 1869–76. 8°. *Wien,* 1870–76.

——— ——— Verzeichniss ausschliessender Privilegien von dem K. K. Privilegien-Archive. 4°. *Wien,* 1855–69.

Atwater, Lyman H. Manual of elementary logic. 12°. *Philadelphia,* 1867.

AXLES for railroad cars. Eisenbahnwagenachsen. *See* **Scheffler,** Adolph.

Digitized by Google

Backus, Samuel D. and William. Village and farm cottages. *See* **Cleaveland,** H. W., **Backus,** W., and **Backus,** S. D.

Bacon, Thomas. Laws of Maryland at large, with proper indexes. Now first collected into one compleat body, and published from the original facts and records remaining in the secretary's office of the said province. Together with notes and other matters, relative to the constitution thereof, extracted from the provincial records. To which is prefixed, the charter, with an English translation. fol. *Annapolis,* 1765.

BADEN. Landwirthschaftliches Centralblatt. Hrsg. von der Centralstelle für die Landwirthschaft. 8°. *Karlsruhe,* 1859.

——— Landwirthschaftliches Correspondenzblatt für das Grossherzogthum Baden. Hrsg. von der Centralstelle für die Landwirthschaft. 8°. *Karlsruhe,* 1859.

Baines, T. Shifts and expedients of camp life. *See* **Lord,** W. B., and **Baines,** T.

Baker, B. Long-span railway bridges, etc. Rev. ed., with numerous formulæ and tables, giving the weight of iron or steel required in bridges, from 300 feet to the limiting spans; and tables relating to short-span railway bridges. *Illus.* 8°. *London,* 1873.

Baker, Charles. Articulation for the deaf and dumb; designed for the use of parents and schoolmasters. [1 large sheet.] *London,* 1872.

BALE-ties, Digest of cotton. *See* **Sinsabaugh,** L. W., and **Tipton,** T. C.

Balfour, Francis M. Elements of embryology. *See* **Forster,** M., and **Balfour,** F. M.

Balling, Carl A. M. Die Probirkunde des Eisens und der Brenn-Materialien; bearb. von. *Illus.* 8°. *Prag,* 1868.

Balló, M. Das Naphtalin und seine Derivate, in Beziehung auf Technik und Wissenschaft. 8°. *Braunschweig,* 1870.

Ballot, J. C. Magazijn voor Landbouw en Kruidkunde. 8°. *Utrecht,* 1863.

BANGKOK (Siam). Calendar for 1871, etc. 8°. *Bangkok,* 1871.

BANKING, The history of. *See* **Lawson,** W. J.

——— Public debt of the United States; its organization, liquidation, etc. *See* **Gibbons,** J. S.

Barber, F. M. Lecture on movable torpedoes, submarine guns and rockets. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— Lecture on submarine boats. *See* UNITED STATES. **Navy** dept. Ordnance papers.

——— Lecture on the Whitehead torpedo. *See* UNITED STATES. **Navy** dept. Ordnance papers.

Barker, George F. The correlation of vital and physical forces. 12°. *New Haven,* 1870. **University series, No. 2.**

BARLEY, malted and unmalted, as food for stock. *See* GREAT BRITAIN. Board of trade.

Barnard, Frederick A. P. Report on industrial arts and exact sciences. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 3.**

——— and **Guyot,** Arnold. Johnson's new universal cyclopædia: a scientific and popular treasury of useful knowledge. Illustrated with maps, plans and engravings. Editors-in-chief, F. A. P. Barnard and A. Guyot; associate editors, M. B. Anderson, J. G. Barnard, L. Blodget, C. F. Chandler, and others. With numerous contributions from writers of distinguished eminence in every department of letters and science in the United States and Europe. v. 1, A—E; 2, F to Lichens; 3, Lichfield—R; 4, S—Appendix. imp. 8°. *New York, Pittsburg, Chicago, Boston, etc.,* 1875–78.

Barnard, John G. Johnson's cyclopædia; ed. by. *See* **Barnard,** F. A. P., and **Guyot,** Arnold.

——— Report on the fabrication of iron for defensive purposes, and its uses in modern fortifications, especially in works of coast defense. 4°. *Washington,* 1872. UNITED STATES. **War dept. Prof. papers of the corps of engineers, No. 21.**

——— Report on the North sea canal of Holland, and on the improvement of navigation from Rotterdam to the sea, to the chief of engineers, United States army. 4°. *Washington,* 1872. UNITED STATES. **War dept. Prof. papers of the corps of engineers, No. 22.**

Barnum, T. P. Connection with the Yankee clock business. *See* **Jerome,** Chauncey.

Digitized by Google

BAROMETER, The aneroid; its construction and use. *See* **Aneroid. Van Nostrand's science series, No. 35.**

BAROMETERS, Description of. *See* **Boye**, M. H. Treatise on pneumatics.

——— Handbuch der barometrischen Höhenmessungen, etc. *See* **Schreiber**, Paul.

——— On the use of. *See* **Williamson**, R. S. UNITED STATES. **War dept. Papers on engineering, No. 15.**

——— Patent compensating portable. *See* **Harris**, A. O.

BARRACKS, hospitals, military posts, Reports on. *See* UNITED STATES. **War dept. Surgeon-general's office. Circular 4.**

Barth, M., and **Roger**, Henri. A manual of auscultation and percussion. Transl. from 6th French ed. 12° *Philadelphia*, 1866.

Bartlett, Elisha. The history, diagnosis, and treatment of the fevers of the United States. 8°. *Philadelphia*, 1847.

Bartlett, W. A., and **Gallatin**, D. B. Digest of cartridges for small arms patented in the United States, England and France, so far as patents have been published. Compiled from the patent records. 4°. *Washington*, 1878.

Bartley, George C. T. Toys. **British manufacturing industries, v. 8.**

Bartram, William. Travels through North and South Carolina, Georgia, East and West Florida, the Cherokee country, the extensive territories of the Muscogulges or Creek confederacy, and the country of the Choctaws, etc. *Illus.* 8°. *London*, 1792.

Bartsch, Sam. A sodró állatkák-és Magyarországbau megfigyelt fajaik. A kir. magyar term. tudományi társulat megbizásából-négy táblával. 4°. *Budapest*, 1877.

BASKETS. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 7.**

Basset, N. Guide théorique et pratique du fabricant d'alcools et du distillateur. Partie 1°. Alcoolisation. 2°. Œnologie. 3°. Distillation, fabrication des l queurs. *Illus.* 8°. *Paris*, 1868–73.

BATAVIA. Societas artium et scientiarum. Codicum arabicorum in bibliotheca societatis artium et scientiarum quae Bataviae floret asservatorum catalogus. 8°. *Bataviæ, Hagæ Comitis*, 1873.

Batchelder, Samuel. A manual of the laws of Massachusetts in relation to manufacturing corporations; together with a summary of the laws affecting corporations generally, in this commonwealth, especially those organized for business purposes. 12°. *Boston*, 1868.

BATHING, History of cold. *See* **Floyer**, John.

——— Medicated vapor bath *See* **Westervelt**, G.

——— A treatise on baths, etc. *See* **Bell**, John.

——— Warm, cold, vapour, and sea. *See* **Clarke**, Arthur.

BATHS of the Romans explained and illustrated. *See* **Cameron**, Charles.

——— of Weilbach. *See* **Roth**, H.

Bauer, A. Chemische Grossindustrie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

Bayer, J., and **Langl**, J. Bildende Kunst. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 25.**

Baynard, Edward. Psychrolousia; or the history of cold bathing: appendix by. *See* **Floyer**, John.

Bazin, C. Notice sur un insecte qui a causé les plus grands ravages dans nos récoltes. Cécidomye du froment. 4°. *Paris*, 1856.

BEAMS, Strength of, under transverse loads. *See* **Allen**, W. **Van Nostrand's science series, No. 19.**

Bean, James B. Mounting artificial teeth, etc. 8°. *Baltimore*, 1868.

BEAUTY, Personal. *See* **Brinton**, D. G.

Bechler, Gustavus R. Map of the German empire and adjoining countries: Belgium, Holland and Switzerland, and portions of Austria, France, Italy, and Prussia. [1 large sheet.] *Philadelphia*, 1871.

Beckwith, Arthur. Asphalt and bitumen in construction. *See* UNITED STATES **State dept. Reports Paris exp. 1867 v. 4.**

Beckwith, Leonard J. Béton-coignet. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

Beckwith, N. M. Correspondence of commissioner general to Paris universal exposition, 1867. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 1.**

Digitized by Google

BEER. Die Chemie des Bieres. *See* **Reischauer**, Carl.

BEES. The bee cultivator. *See* **Allen**, T. R.

——— The beekeeper's companion. *See* **Dillingham**, John.

——— The bee-keeper's guide. *See* **Wheeler**, Clark.

——— The farmer's guide and bee cultivator. *See* **Payne**, Uriah.

——— The honey-bee, etc. *See* **McCulley**, Henry.

——— Die italienische Alpenbiene. *See* **Hermann**, H. E.

——— Nature's bee book. *See* **Flanders**, W. A.

——— New system of bee keeping. *See* **Adair**, D. L.

——— Their keeping and management. *See* **Hoffman**, Martin.

——— Winter management of. *See* **Miner**, T. B.

BEET sugar, and cultivation of the beet. *See* **Grant**, E. B.

——— ——— Report on. By H. F. Q. D'Aligny. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

——— ——— Der Werth der Zuckerrübenanalyse. *See* **Jičinský**, Ferdinand.

Begbie, J. Warburton. On diseases of the skin. *See* **Radcliffe**, C. B., and others. **Medical news lectures, v. 4.**

BELGIUM. Les instruments d'agriculture à l'exposition de Londres, 1851. 12°. *Bruxelles*, 1852.

——— Ministère de finances. Statistique de la Belgique. Tableau général du commerce avec les pays étrangers, de 1849–51. T. 1–19. 4°. *Bruxelles*, 1842–60.

——— Ministère des travaux publics. Statistique de la Belgique. Mines, minières, usines mineralurgiques, et machines à vapeur, de 1850–55. T. 1–2. 4°. *Bruxelles*, 1855.

Bell, A. N. The sanitarian; ed. by. *See* **Sanitarian.**

Bell, Alexander Graham. The telephone. *See* LONDON. **Society** of telegraph engineers.

Bell, John. Water; or a preservative of health, and a remedy in disease. A treatise on baths: including cold, sea, warm, hot, vapor, gas, and mud baths; also, on hydropathy and pulmonary inhalation; with a description of bathing in ancient and modern times. 8°. *Philadelphia*, 1859.

Bellows, C. F. R. Analysis of arithmetic. 8°. *Decatur*, 1868.

BELTING, Use of, for the transmission of power. *See* **Cooper**, John H.

Bender, Charles. Practical treatise on the properties of continuous bridges. 18°. *New York*, 1876. **Van Nostrand's science series, No. 26.**

——— Proportions of pins used in bridges. 18°. *New York*, 1873. **Van Nostrand's science series, No. 4.**

Benedikt, Moriz. Apparate für Elektrotherapie. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

Bennett, Gilson M. The great art of taming and training wild horses. 12°. *Rochester*, 1857. pp. 24.

Benrath, H. E. Die Glasfabrikation. *Illus.* 8°. *Braunschweig*, 1875.

Berg, Conrad, **Exner,** Wilhelm F., and **Nagel,** Ignatius. Buchbinderei, Tapeten, Schreib- etc. Requisiten. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

Berg (*Oberbaurath*). Das Wasserwerk der Stadt Bremen, entworfen von. *See* **Böttcher**, Emil, and **Ohnesorge**, H.

BERLIN. Botanischer Verein der Provinz Brandenburg. Verhandlungen. 15 Jahrgänge. Rev. und hrsg. von P. Ascherson, etc. [1–5 are called Heft; 9 is missing; 1–11 are entitled "für die Provinz Brandenburg und die angrenzenden Länder".] 8°. *Berlin*, 1859–73.

——— Verein 'die Hütte'. Des Ingenieurs Taschenbuch. Hrsg. von dem Verein 'die Hütte'. Dritte, mit Berücksichtigung des neuen Gewichts-Systems vollständig umgearbeitete und sehr vermehrte Auflage. *Illus.* 16°. *Berlin*, 1860.

Berlioux, Étienne Félix. The slave trade in Africa in 1872. Principally carried on for the supply of Turkey, Egypt, Persia, and Zanzibar. From the French. 8°. *London*, 1872.

BERMUDAS, Fishes of. By G. Brown Goode. *See* UNITED STATES. **Interior dept. Nat. museum. Bull. 5.**

Bernhardi, Bruno. Beiträge zur Kenntniss des Santonin. Inauguraldissertation zu Leipzig. 12°. *Leipzig*, 1868.

Berry, William C. History of mysteries revealed; the great secret of subduing and educating the horse. 12°. *Indianapolis*, 1865. pp. 32.

Digitized by Google

Berthold, Theodor, and **Fürstenau,** Moritz. Die Fabrikation musikalischer Instrumente und einzelner Bestandtheile derselben im königl. sächsischen Vogtlande. Bearb. von. 8°. *Leipzig*, 1876.

BESSEMER process. Die Bessemeranlage auf der Vulcan-Hütte zu St. Louis. *See* **Wedding,** H.

BÉTON-coignet. Coignet-béton, and other artificial stone. *See* **Gillmore,** Q. A.

——— ——— Report on. By L. F. Beckwith. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

Bevan, G. Phillips. British manufacturing industries. *See* **British.**

BIBLIOGRAPHY. The American bookseller. *See* **American.**

——— Catalogue annuel de la librairie française. *See* PARIS. **Librairie** française.

——— Catalogue général de la librairie française. *See* PARIS. **Librairie** française.

——— Catalogue of Burlington, N. J., library. *See* BURLINGTON.

——— Catalogue of the Kewanee public library. *See* KEWANEE.

——— Catalogue of the library of the Boston athenæum. *See* BOSTON.

——— Catalogue of the library of the Manchester literary and philosophical society. *See* MANCHESTER. Lit. and phil. society.

——— Catalogue of the library of the Sassoon mechanics' institute. *See* **Sassoon.**

——— Catalogue of the library of the treasury. *See* UNITED STATES. **Treasury** department.

——— Catalogue of the Massachusetts horticultural society. *See* MASSACHUSETTS. Horticultural society.

——— Catalogue of the mercantile library of Brooklyn. *See* BROOKLYN.

——— Catalogue of the public library of the city of Taunton, Mass. *See* TAUNTON, Mass.

——— Catalogue of the reference department, Birmingham free libraries. *See* BIRMINGHAM.

——— Catalogue of the Rockford public library. *See* ROCKFORD.

——— Catalogue of the United States patent office library, 1847. *See* UNITED STATES. **Interior** dept. Patent office.

——— A classification and subject-index for cataloguing. *See* **Dewy,** Melville.

——— A dictionary of engineering terms in German-English and English-German. *See* **Dictionary** of engineering terms.

BIBLIOGRAPHY. Dictionnaire raisonné d'architecture. *See* **Bosc,** Ernest.

——— Index to the catalogue of books in the Bates hall. *See* BOSTON. **Public** library.

——— Index to the St. Louis public school library. *See* ST. LOUIS.

——— of the Paris universal exposition, Report on. By W. P. Blake. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 1.**

——— Putnam's library companion. *See* **Perkins,** F. B.

BILLIARDS, The game of. *See* **Phelan,** Michael.

Binder, Robert. Deutsche Industrie-Zeitung. Organ der Handels- und Gewerbekammern zu Chemnitz, Dresden, Plauen, und Zittau. 4°. *Chemnitz und Leipzig*, 1866.

BINGHAMTON directory, 1867. *See* **Wilson,** H.

Biographical (The) encyclopedia of Pennsylvania of the nineteenth century. *Illus.* 4°. *Philadelphia*, 1874.

BIOGRAPHY. Account of John Glover *See* **Glover,** Anna.

——— Biographical encyclopædia of Pennsylvania. *See* **Biographical.**

——— Cotemporary. The rank and talent of the time. *See* **Rank** and talent.

——— Life of Samuel F. B. Morse. *See* **Prime,** S. I.

BIOLOGY, Mental alchemy, electro-physiology and. *See* **Williams,** B. Brown.

BIRMINGHAM. Free libraries. Catalogue of the reference department. By J. D. Mullins. 8°. *Birmingham*, 1869.

——— Free libraries committee. Borough of Birmingham. 12th annual report. 8°. *Birmingham*, 1873.

Birnbaum, Karl. Löthrohrbuch. Benutzung des trockenen Weges bei chemischen Analysen. 8°. *Braunschweig*, 1872.

Bischof, Carl. Die feuerfesten Thone, deren Vorkommen, Zusammensetzung, Untersuchung, Behandlung, und Anwendung mit Berücksichtigung der feuerfesten Materialien überhaupt. *Illus.* 8°. *Leipzig*, 1876.

BLACK HILLS of Dakota, Reconnaissance of the. *See* UNITED STATES. **War** dept. Bureau of engineers.

Blake, William P. Engineering and public works. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

Digitized by Google

Blake, William P. Mining magazine; ed. by. *See* **Mining.**

——— Report on bibliography. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 1.**

——— Report on iron and steel. *See* UNITED STATES. **State dept. Reports Vienna exh. 1873, v. 4.**

——— Report upon the precious metals. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 2.**

——— Reports of the United States commissioners to the Paris universal exposition, 1867; ed. by. *See* UNITED STATES. **State department.**

Blanc, Charles. Art in ornament and dress. Transl. from the French of. *Illus.* 8°. *New York,* 1877.

Blanchard, N. H. The instructor for the old and young; or the guide to beauty, health, wealth, happiness and a long life. 18°. *New York,* 1847.

Bland, T. A. Farming as a profession: or how Charles Loring made it pay. 16°. *Boston,* 1870.

BLAST engines. *See* **Coulthard,** H. C.

BLASTING. Spring-Technik. Von Johann Lauer. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

Blatchly, A. Mining and milling in the Reese river region, central and southeast Nevada. 12°. *New York,* 1867. pp. 48.

BLEACHING. British manufacturing industries, v. 6.

——— Der Färber. Theil 3. Färberei, Bleicherei, etc. *See* **Schrader,** Hermann.

BLIND and deaf-mutes. Blinden- und Taubstummen-Unterricht. Von E. Kaltner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— Instruction of. Colegio nacional de sordo-mudos y de ciegos de Madrid. *See* SPAIN. **Instruccion** pública.

Block, Albrecht. Mittheilungen landwirthschaftlicher Erfahrungen, Ansichten und Grundsätze. B. 1–3. 4°. *Breslau,* 1839–43.

BLOWPIPE analysis, Manual of. *See* **Elderhorst,** William.

——— Determination of minerals by the. *See* **Fuchs,** C. W. C.

——— Löthrohrbuch. *See* **Birnbaum,** Karl.

BLOWPIPE tables. Löthrohr-Tabellen zur chemischen Untersuchung. *See* **Hirschwald,** J.

BLUE ray and sunlight. *See* **Pleasanton,** A. J.

Blumenthal, Carl August. Nähere Prüfung der Aetiologie der Zahnarbeit der Kinder. 8°. *Stendel,* 1799.

Bochner, Theodor. Wolle, Wollwaaren und bei deren Fabrikation verwendete Maschinen. *See* PHILADELPHIA, etc. **Berichte der Oesterr. Comm. Weltausst. 1876. Heft 5.**

Bodmer, J. J. Mittheilungen über das mechanische Puddeln nach Danks. 8°. *Wien,* 1872.

Boeck, Wilhelm. Syphilisationen studeret ved Sygesengen. Universitetsprogram for andet Halvaar 1854. 8°. *Christiania,* 1854.

Böhmer, Emil, and **Neumann,** Friedrich. Kalk, Gyps und Cement. Handbuch für Anlage und Betrieb von Kalkwerken, Gypsmühlen, und Cementfabriken. Mit Rücksicht auf die Anwendung dieser Materialien in der Praxis, nebst Literatur-Nachweis und Tabellen, bearbeitet von. 4te Aufl. von A. W. Hertel's Lehre von Kalk und Gyps, etc., in gänzlicher Umarbeitung. Nebst einen Atlas. sm. 8°. *Weimar,* 1870. **28 Neuer Schauplatz der Künste.**

BOILER-armatures and lubrication. Kesselarmaturen und Schmiervorrichtungen. Von Victor Novelly. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

BOILERS. Dampfmaschinen und Dampfkessel. *See* **Neumann,** Friedrich. **224 Neuer Schauplatz der Künste.**

——— Explosion of steam. *See* **Colburn,** Zerah. **Van Nostrand's science series, No. 2.**

——— Incrustation and corrosion. *See* **Rowan,** F. J. **Van Nostrand's science series, No. 27.**

——— Die Kesselsteinbildung und Verhütung desselben. *See* **Roth,** Ludwig.

Boller, Alfred P. Practical treatise on the construction of iron highway bridges; for the use of town committees, etc. *Illus.* 8°. *New York,* 1876.

Bolmar, A. A collection of colloquial phrases on every topic necessary to maintain conversation in the French language, revised and adapted to the use of pupils

Digitized by Google

Bolmar, A.—Continued.
of the blind department of the Virginia institution for the education of the deaf and dumb and of the blind. 4°. *Staunton, Va.*, 1847.

BOLTS, Railway. **British manufacturing industries, v. 3.**

Bomhauer, E. H. v. Sur un météorographe universel destiné aux observatoires solitaires. Extrait des Archives néerlandaises. T. 9. *Illus.* 8°. *Harlem,* 1874. pp. 29.

Bond, Henry. The works of Edmund Gunter; corrected by. *See* **Gunter,** Edmund.

Bond, Joseph B. The master-mariner's guide in the management of his ship's company, with respect to their health; being designed to accompany a ship's medicine chest. 18°. *Boston,* 1847.

BONE staining and polishing. Das Beizen, Schleifen und Poliren des Holzes, Beins, etc. *See* **Schmidt,** Wilhelm. **107 Neuer Schauplatz der Künste.**

Bonelli, Giorgio. Memoria intorno all'olio di ricino volgare dedicata all'Emo e Rmo sig. cardinale D. Pasquale Acquaviva d'Aragona. Aggiuntivi due opuscoli sulla stessa materia, l'uno del signor Cauvane, e l'altro del signor Hungerbyhler. sm. 8°. *Roma,* 1782.

Bonelli, G. Télégraphe des locomotives; système destiné à prévenir les collisions sur les chemins de fer. 8°. *Paris,* 1856.

Bontemps, G. Guide du verrier; traité historique et pratique de la fabrication des verres, cristaux., vitraux. *Illus.* 8°. *Paris,* 1868.

BOOKBINDING. Buchbinderwerkzeuge. *See* **Musterzeichnungen,** etc.

——— and machinery. Buchbinderei, Cartonage und Maschinen. Von Conrad Berg. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

——— **British manufacturing industries, v. 8.**

BOOK-keeping and law forms. *See* **Wells's** lawyer.

——— Book-keeper's manual. *See* **Branigan,** W.

——— of household pets, and how to manage them; containing complete and valuable instruction about the diseases, breeding, training and management of Canary birds, etc. 18°. *New York,* 1866.

BOOK-making. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 13.**

——— printing. Buchdruck. Von Ludwig Lott. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

——— trade, Austro-Hungarian. Deutscher und österreichisch-ungarischer Verlags-Buchhandel. Von Rudolf Lechner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— ——— Foreign. Buchhandel und Literatur des Auslandes. Von Alfred Klaar. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

BOOTS. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 12.**

BORACIC-tartaric acid. Borweinsäu e. *See* **Duve,** A. F. W.

Borgmann, Eugen. Toluchinone. Inauguraldissertation an der Universität zu Leipzig. 12°. *Leipzig,* 1868.

BORING. Gebrauch des Erdbohrers. *See* **Fauck,** A.

——— Die Tiefbohrtechnik. *See* **Strippelmann,** Leo.

——— wells, Sinking and. *See* **Spon,** Ernest.

Bornemann, C. R. Generalregister. B. 1 bis 20, 1854 bis 1874, des Civilingenieur. Zeitschrift für das Ingenieurwesen. Hrsg. von. A.—Sachregister. B.—Namenregister. 4°. *Leipzig,* 1875.

Bosc, Ernest. Dictionnaire raisonné d'architecture et des sciences et arts qui s'y rattachent. T. 1. Abcule–Cymaise. roy. 8°. *Paris,* 1877.

BOSTON athenæum. Catalogue of the library, 1807–71. Part 1–2. l. 8°. *Boston,* 1874–76.

——— Public library. Index to the catalogue of books in the Bates hall. First supplement. imp. 8°. *Boston,* 1876.

Bosworth, Newton. Pantologia. *See* **Good,** J. M., **Gregory,** O., and **Bosworth,** N.

BOTANY. Dissertation on the phytolacca decandra. *See* **Shultz,** Benjamin.

——— Flora, oder allgemeine botanische Zeitung. *See* **Flora.**

——— Die Pflanzenwelt Norwegens. *See* **Schübeler,** F. C.

——— Verhandlungen des botanischen Vereins der Proving Brandenburg. *See* BERLIN.

Digitized by Google

Both, C. Method for treating tubercular consumption. Reprinted from the New York medical record. 8°. *New York,* 1877. pp. 20.

Böttcher, Emil, and **Ohnesorge,** H. Das Wasserwerk der freien Hansestadt Bremen. Entworfen und ausgeführt vom Oberbaurath Berg. Hrsg. von. *Illus.* fol. *Berlin,* 1876. pp. 18.

Boulton, Matthew, Life of. *See* **Smiles,** Samuel. **Lives of the engineers, v. 4.**

Boutell, Charles. Gold working. **British manufacturing industries, v. 11.**

Bouton, Louis. Medical plants in Mauritius. *See* MAURITIUS.

Boutwell, George S. A manual of the direct and excise tax system of the United States; including the forms and regulations established by the commissioner of internal revenue, the decisions and rulings of the commissioner, together with extracts from the correspondence of the office. 8°. *Boston,* 1863.

Bowen, James H. Report on buildings, etc. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

Bowler, George. Chapel and church architecture, with designs for parsonages. 8°. *Boston, Cleveland, New York,* 1856.

Boyd, James R. Elements of logic; on the basis of lectures by William Barren, etc. 12°. *New York,* 1856.

Boye, Martin H. A treatise on pneumatics; being the physics of gases, including vapors. Containing a full description of the different air-pumps, barometers, pressure gauges, hygrometers and other meteorological instruments. *Illus.* 8°. *Philadelphia,* 1855.

Brainerd, John. An essay on pear-blight. Read before the Potomac fruit-grower's association, Washington, D. C. With an introductory note by J. P. Kirtland. 8°. *Columbus,* 1876.

Brandon, R. Railways and the public; fares for any distance of one shilling, six pence and three pence, for first, second, and third class. 8°. *London,* 1869.

Brandt, —. Hydraulische Gesteins-Bohrmaschine. *See* **Riedler,** A.

Brandt, F. Kong Christian den fjerdes norske lovbog af 1604, udgiven af. *See* NORWAY.

BRANDY, Laws and regulations relating to. Die Branntweinsteuer-Gesetzgebung. *See* **Gumbinner,** L.

——— Manufacture and distillation of alcoholic liquors. *See* **Duplais** *aîné et jeune.*

Branigan, William. The bookkeeper's manual, containing the necessary directions for opening books. 16°. *Detroit,* 1846. pp. 27.

BRASS founding. **British manufacturing industries, v. 1.**

——— work, Illustrated catalogue of. *See* **Carr,** A.

BRAZIL and the Brazilians. *See* **Fletcher,** J. C., and **Kidder,** D. P.

——— The empire of Brazil at the universal exhibition of 1876, in Philadelphia. 8°. *Rio de Janeiro,* 1876.

——— The home for southerners. *See* **Dunn,** Ballard S.

——— A journey in. *See* **Agassiz,** Louis J. R. and Elizabeth.

BREMEN waterworks. Das Wasserwerk der Stadt Bremen. *See* **Böttcher,** Emil, and **Ohnesorge,** H.

BREWED liquids. Gegohrene Flüssigkeiten. Von Eduard Schmidt. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

BREWING. British manufacturing industries, v. 12.

——— and implements of. Bier, Malz und Maschinen für Brauereien. Von Gustav Noback. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

——— and malting. Handbuch für Bierbrauer und Malzer. *See* **Peltz,** E., and **Habich,** R.

——— Atlas von Construktions-Zeichnungen der Geräthe, etc., für Bierbrauereien. *See* **Habich,** G. E. and H.

——— Chemistry of the brewing-room. *See* **Piesse,** C. H.

——— Die neuesten Fortschritte in der Brauerei. *See* **Wendt,** A.

Brewster, David. Description of several new micrometers. 8°. *Edinburgh,* 1813.

——— The Edinburgh encyclopædia; by. With the assistance of gentlemen eminent in science and literature 1st Amer. ed., corrected and improved by the addition of numerous articles relative to the institutions of the American continent; its geography, biography, civil and nat-

Digitized by Google

Brewster, David—Continued.
ural history, and to various discoveries in science and the arts. v. 1–18. [Regular title-page wanting to vols. 1–9.] 4°. *Philadelphia*, 1822.

—— A treatise on new philosophical instruments, for various purposes in the arts and sciences; with experiments on lights and colours. 8°. *Edinburgh*, 1813.

Brey, Gaetano. Dizionario enciclopedico tecnologico popolare. v. 1–5. 8°. *Milano*, 1843–48.

Breymann, —, and **Lang,** —. Allgemeine Bau-Constructions-Lehre, mit Beziehung auf das Hochbauwesen. Theil 1: Constructionen in Stein. 2: Constructionen in Holz. 4°. *Stuttgart*, 1868–70.

BRICKLAYING, Practical. *See* **Hammond,** Adam.

BRICKMAKING. Briquetier, chaufournier et plâtrier. *See* **Lejeune,** Émile.

BRICKS and materials. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 2.**

—— cements, etc. Verein für Fabrikation von Ziegeln, Kalk, Cement, etc. *See* **Türrschmiedt,** A.

BRIDGE and tunnel centres. *See* **McMaster,** John B. **Van Nostrand's science series, No. 20.**

—— building. Vorträge über Brückenbau. *See* **Winkler,** E.

—— trusses. Graphical method for the analysis of. *See* **Greene,** Charles E.

Bridges, Lyman. Report on the buildings of the exhibition, and on railroad structures. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

BRIDGES, continuous, Practical treatise on the properties of. *See* **Bender,** Charles. **Van Nostrand's science series, No. 26.**

—— Continuous revolving drawbridges. *See* **Herschel,** Clemens.

—— —— Theory and calculations of. *See* **Merrimon,** Mansfield. **Van Nostrand's science series, No. 25.**

—— Harbors, lighthouses and. *See* **Smiles** Samuel. **Lives of the engineers, v. 2.**

—— Iron highway. *See* **Boller,** A. P.

—— Long-span railway. *See* **Baker,** B.

—— Movable. System einer beweglichen Brücke. *See* **Roeper,** Oscar.

BRIDGES, Proportions of pins used in. *See* **Bender,** Charles. **Van Nostrand's science series, No. 4.**

—— suspension, Cable making for. *See* **Hildenbrand,** Wilhelm. **Van Nostrand's science series, No. 32.**

—— —— The Clifton and other remarkable. *See* **Wright,** Lewis.

—— —— Tower foundations of the East river suspension bridge. *See* **Roebling,** W. A.

Briggs, Robert. On the conditions and the limits which govern the proportions of rotary fans; with an abstract of the discussion upon the paper. Ed. by James Forest; by permission of the council. Excerpt minutes of proceedings of the Institution of civil engineers. v. 30, session 1869-70, part 2d. 8°. *London*, 1870. pp. 36.

—— Report on the ventilation of the hall of representatives, and of the south wing of the Capitol of the United States. To Prof. J. Henry, T. L. Case, J. S. Billings, E. Clark, F. Schumann, commission of inquiry, etc. 8°. *Philadelphia*, 1876.

Brinton, D. G., and **Napheys,** George H. Personal beauty; how to cultivate and preserve it, in accordance with the laws of health. 16°. *Springfield, Mass.*, 1870.

British manufacturing industries. By G. Phillips Bevan. 13 v. published. [v. 1, 4, 5, are 2d ed.; v. 7 and 8 are entitled, Industrial classes and industrial statistics.] 12°. *London*, 1876–77——.

CONTENTS.

v. 1. Iron and steel. By W. Mattieu Williams.
Copper smelting. By J. Arthur Phillips.
Brass founding, tin plate and zinc working. By Walter Graham.
2. Metallic mining and collieries. By W. W. Smith.
Coal. By A. Galletly.
Building stones. By Hull.
Explosive compounds. By W. M. Williams.
3. Guns, nails, locks, wood screws, railway bolts and spikes, buttons, pins, needles, saddlery and electroplate. By the late W. C. Aitken.
Pens and papier-mâché. By G. Lindsay.
4. Acids, alkalies, soaps, and minor chemical products. By Church.
Oils and candles. By W. M. Williams.
Gas and gas lighting. By R. H. Patterson.
5. Wool and its applications. By Archer.
Flax and linen. By W. T. Charley.
Cotton. By Isaac Watts.
Silk. By B. F. Cobb.

Digitized by Google

British manufacturing industries—Cont'd.

6. Hosiery and lace. By the late W. Felkin.
Carpets. By Christopher Dresser.
Dyeing and bleaching. By T. Sims.
7. Minings, metals, chemicals, ceramics, glass and paper. With maps.
8. Paper. By Archer.
Printing and bookbinding. By J. Hatton.
Engraving. By the late S. Davenport.
Photography. By P. Le Neve Foster.
Toys. By G. C. T. Bartley.
9. Tobacco. By John Dunning.
Hides and leather. By J. Collins.
Guttapercha and india rubber. By J. Collins.
Fibres and cordage. By P. L. Simmons.
10. Ship building, By Bedford Pim.
Telegraphy. By Robert Sabine.
Agricultural machinery. By Wrightson.
Railways and tramways. By D. Kinnear Clarke.
11. Jewelry. By George Wallis.
Gold working. By Charles Boutell.
Watches and clocks. By F. J. Britten.
Musical instruments. By E. F. Rimbault.
Cutlery. By F. Callis.
12. Salt, preservation of food, bread and biscuits. By J. J. Manley.
Sugar refining. By C. Haughton Gill.
Butter and cheese. By Morgan Evans.
Brewing, distilling. By T. A. Poorley.
13. Textiles and clothing, food, sundry industries. With maps.

Britten, F. J. Watches and clocks. **British manufacturing industries, v. 11.**

Brix, A. Bericht über die in 1863 angestellte Vergleichung zweier Metermaasse mit dem Urmeter zu Paris. 8°. *Berlin,* 1864.

Broch, O. J. Beregning af et fast legemes specifike vaegt sams amendelse heraf på guldmynter. 12°. *Christiania,* 1876.

—— Beretning om den internationale meter-kommissions møde i Paris 24 Septbr.–12 Octbr. 1872. 8°. *Christiania,* 1874.

—— Indstilling fra den kommission angaaende lovgivningen om maal og vaegt. *See* NORWAY.

—— Vaegtsammenligninger af kilogrammer og af de norske normaler for vaegt. 8°. *Christiania,* 1873.

Brodhead, John Romeyn. Documents relative to the colonial history of New York, procured by; with introduction. *See* NEW YORK (state).

Brongniart, A., and **Riocreux,** D. Description méthodique du musée céramique de la manufacture royale de porcelaine de Sèvres. Texte et planches. 4°. *Paris,* 1845.

Brongniart and **Riocreux**—Cont'd.

BRONZES. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 11.**

BROOKLYN (N. Y.) The Brooklyn waterworks and sewers; a descriptive memoir, prepared and printed by order of the Brooklyn water commissioners. *Illus.* 4°. *New York,* 1867.

—— directory. *See* **Lain,** G. T.

—— Mercantile library. Catalogue; authors, titles, subjects, and classes. Part 1. 4°. *Brooklyn, N. Y.,* 1877.

Brooks, David. Report on telegraphs and apparatus. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Brooman, R. A. Mechanics' magazine; ed. by. *See* **Mechanics'.**

Brossard-Vidal. Notice sur l'ébullioscope alcoométrique, ou alcoomètre Vidal; instrument pour reconnaître la falsification des vins et tous les liquides spiritueux, par l'inventeur. 8°. *Paris,* 1846. pp. 28.

Brown, Arthur H. Report on government printing. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Brown, Goold. The institutes of English grammar, methodically arranged; with forms of parsing and correcting, examples for parsing, questions for examination, and a key to the oral exercises. To which are added four appendixes. New ed. 12°. *New York,* 1856.

Brown-Séquard, C. E. Lectures on the diagnosis and treatment of functional nervous affections. [Part 1.] 8°. *Philadelphia,* 1868.

BROWN-hay (or hay compressed for fermentation, when half dry). Das Braunheu und sein Futterwerth. *See* **Weber,** *Dr.*

Brownell, Charles De Wolf. The Indian races of North and South America. *Illus.* 8°. *New York,* 1853.

Brunner, Moriz,, and others. Militairwesen. Genie- und Unterrichtswesen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

Brusina, Spiridione. Contribuzione della fauna dei molluschi Dalmati. 8°. *Vienna,* 1866.

Digitized by Google

BRUSSELS. Ministère de l'intérieur. Enquête sur l'industrie linière. T. 1. Interrogatoires. T. 2. Explorations à l'étranger. 4°. *Bruxelles*, 1841.

Bucher, Bruno. Geschichte der technischen Künste. B. 2. 8°. *Stuttgart*, 1875.

—— and **Gnaukh,** A. Das Kunsthandwerk. Sammlung mustergültiger und kunstgewerblicher Gegenstände aller Zeiten. B. 1–3, Jahrg. 1874–76. 4°. *Stuttgart*, 1874–76.

BUCKSKIN manufacture. Weberei des Tuch- und Buckskinfabrikanten. *See* **Stommel,** Cuno.

Budd, Thomas. Good order established in Pennsylvania and New Jersey in America, being a true account of the country; with its produce and commodities, made in the year 1685. 8°. *Philadelphia*, 1865.

BUENOS AYRES. Ley de patentes de invencion, decretos del gobierno nacional, reglamentandola y nombrando el personal de la oficina y reglamento provisorio de esta. 8°. *Buenos Aires*, 1866. [2 copies.]

BUILDER'S hardware. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 15.**

BUILDING. American architect and building news. *See* **American.**

—— Architectural review and American builder's journal. *See* **Architectural.**

—— Atlas des Bauwesens. *See* **Fränkel** and **Heyn.**

—— Bau-Constructions-Lehre. *See* **Breymann** and **Lang.**

—— Denkschriften, hrsg. vom Verbande deutscher Architekten- und Ingenieur-Vereine. *See* **Verband.**

—— Examples of iron, brick and trussed bridges, etc. *See* **Dempsey,** G.

—— materials. Beschaffenheit der Baumaterialien. *See* **Gottgetreu,** Rudolph.

—— plans. Möbel- und Baupläne. *See* **Muster-Zeichnungen.**

—— stones. **British manufacturing industries, v. 2.**

—— Use of sheet metal in. *See* **Sheet** metal builder.

BUILDINGS, building materials, etc., Report on. By J. H. Bowen. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

—— Plans of public and private, in England, including new customhouse, London. *See* **Laing,** David.

BUILDINGS, Ventilation of. *See* Butler, W. F. **Van Nostrand's science series, No. 5.**

Bullions, Peter. Analytical and practical grammar of the English language. 21st rev. ed. 12°. *New York*, 1853.

—— The principles of English grammar; comprising the substance of the most approved English grammars extant, with exercises in parsing and syntax. 19th ed. 12°. *New York*, 1846.

Bump, Orlando F. The law of patents, trade-marks and copy-rights: consisting of the sections of the revised statutes of the United States, with notes under each section, referring to the decisions of the courts, and the commissioner of patents. With the rules of the patent office, and a selection of forms. 8°. *New York*, 1877.

Burat, Amédée. Les houillères en 1867, d'après les documents de l'exposition universelle, par. Texte et atlas. 8° and 4°. *Paris*, 1868.

—— Supplément au cours d'exploitation des mines. 8°. *Paris*, 1874.

Burgess, J. T. Angling: a practical guide to bottom fishing, trolling, spinning, and fly-fishing. 8°. *London*, [1867].

BURLINGTON (N. J.) library, Catalogue of books belonging to. 16°. *Burlington, N. J.*, 1876.

Burn, Robert S., **Walker,** W., **Brown,** A. B., **Lightbody,** Francis, and **Davis,** Robert. Working drawings and designs in mechanical engineering and machine making, with essays on various subjects. R. S. Brown, general editor. fol. *Edinburgh and London, n. d.*

BUSINESS directory, Zell's United States, for 1875. *See* **Zell's.**

—— Everybody's lawyer and counsellor in. *See* **Crosby,** Frank.

—— Taschenbuch für Kaufleute. *See* **Rothschild,** L.

Busk, Hans. Steam life-ships and how to build them. 4°. *London*, 1874. pp. 24.

BUTTER, Analysis of. *See* **Wanklyn,** J. A.

—— **British manufacturing industries, v. 12.**

BUTTONS. British manufacturing industries, v. 3.

Cabello y Madurga, Pedro. Colegio nacional de sordo-mudos y de ciegos de Madrid. *See* SPAIN. Instruccion pública.

CABINET maker's guide. *See* **Siddons,** A. G.

Digitized by Google

CABINET making. The cabinet maker. *See* **Guide** to trade.

——— making. Möbeltischlerei. Von Bernhardt Ludwig. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 8.**

——— ——— The modern style of cabinet work exemplified. *See* **King**, Thomas.

CABLE making for suspension bridges. *See* **Hildenbrand**, Wilhelm. **Van Nostrand's science series, No. 32.**

CABLES, Atlantic, History of. By H. F. Q. D'Aligny. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

Cadwalader, John L. Opinions of attorneys-general, digested by. *See* UNITED STATES. **Dept. of justice.**

Cain, William. A practical theory of voussoir arches. *Illus.* 18°. *New York*, 1874. **Van Nostrand's science series, No. 12.**

CALCULATOR, The new lightning. *See* **Fairbanks, L.**

CALENDAR. Calendario histórico musical, para 1873. *See* **Soriano Fuertes**, Mariano de.

Calhoun, William G. The farrier recipe; or general remedies, for all the diseases the horse is incident to. 8°. *Wetumpka, Ala.*, 1858.

CALIFORNIA, Gold regions of, etc. *See* **Ansted**, D. T.

——— Natural history of Lower. By T. H. Streets. *See* UNITED STATES. **Interior dept. Nat. museum. Bull. 7.**

——— Review of the trade in. *See* **Commercial** herald review.

——— Three years in. *See* **Colton**, Walter.

——— Scenery of the plains, mountains and mines. *See* **Langworthy**, Franklin.

CALLIGRAPHY. Schreibunterricht. Von J. Hüpscher. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

Callis, F. Cutlery. **British manufacturing industries, v. 11.**

Camak, James. Southern cultivator; ed. by. *See* **Southern.**

CAMELS for military transportation, Purchase of. *See* UNITED STATES. **War department.**

Cameron, Charles. The baths of the Romans explained and illustrated; with preface upon the nature of the work, and a dissertation upon the state of the arts during the different periods of the Roman empire. fol. *London*, 1772.

CAMP life. Shifts and contrivances available in wild countries. *See* **Galton**, Francis. Art of travel.

——— ——— Shifts and expedients of. *See* **Lord**, W. B., and **Baines**, T.

Camper, Petrus. The works of the late Prof. Camper, on the connection between the science of anatomy and the arts of drawing, painting and statuary, etc., and on beauty as exhibited in ancient sculpture. Trans. from the Dutch by T. Cogan. *Illus.* 4°. *London*, 1794.

CAMPFIELD, Catalogue of lending library at *See* MANCHESTER. Public free libraries

CANADA, Newspapers in. *See* **Rowell**, George P.

CANAL and river engineering. Schiffbarmachung der Flüsse. *See* **Schlichting.**

CANALS and embankments. *See* **Smiles**, Samuel. **Lives of the engineers, v. 1.**

——— of the United States. Die Wasserstrassen in den Vereinigten Staaten. *See* **Mosler**, C.

——— De overijsselsche Kanalen. *See* **Zwolle.**

CANDLES. British manufacturing industries, v. 4.

Canvane. Olio di ricino volgare; opuscolo aggiuntivo. *See* **Bonelli**, Giorgio.

Capsoni, Giovanni. Influenza delle risaje sulla salute humana. 8°. *Milano*, 1851

CARBÒ-hydrates. Chemie und Physiologie der Farbstoffe, Kohlehydrate, etc. *See* **Sachsse**, Robert.

Carderera, Mariano. Pedagogía práctica. Curso completo de lecciones y ejercicios para las escuelas, par. Tomo 1. La enseñanza y el niño. 8°. *Madrid*, 1874.

CARLSRUHE. Polytechnische Schule. Zeichnungen über Wasser- und Strassenbau. 1ter Cours. Mauerwerk. 2. Erdbau. 3. Grundbau. fol. *Carlsruhe, n. d.*

Carpenter, C. F. Report on instruments of precision. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Carr, A. Illustrated catalogue of brass work and supplies for plumbers, engine builders, steam and gas fitters. Selden's direct action steam pump. Carr's positive circulating upright radiator. Iron pipe, brass, malleable and gray iron fit-

Digitized by Google

Carr, A.—Continued.
tings for steam, water and gas, manufactured by. 4°. *New York,* 1873. [With supplement, bound separately.]

CARRIAGE-making. Wagnerarbeiten. *See* **Musterzeichnungen,** etc.

CARRIAGES. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 17.**

Carrière, E. A. Réfutation de divers articles de M. le Dr. J. Guyot, contre le système de M. Daniel Hooibrenk sur la culture de la vigne, et critique du rapport fait par la commission nommée par la Société impériale et centrale d'horticulture de la Seine, sur le même sujet. 8°. *Paris, n. d.*

CARTRIDGES for small arms, Digest of. *See* **Bartlett, W. A.,** and **Gallatin,** D. B.

Carutti, D. Rapporto per lo studio della malattia dei bachi da seta. 8°. *Milano,* 1856.

Carver, J. Veterinary science. 8°. [*Philadelphia*], 1817. pp. 49.

CASTOR oil. Olio di ricino volgare. *See* **Bonelli,** Giorgio.

Catacaustische Curven oder Brennlinien durch Zurückwerfung. *n. t. p.*

CATALOGUE of playing and other cards in the British museum, Descriptive. *See* **Willshire,** W. H.

CATTLE-show. Concours des animaux en 1853–1856. *See* PARIS. **Ministre** de l'agriculture, etc.

Caus, Isaak de. New and rare inventions of water-works, shewing the easiest waies to raise water higher than the spring. By which invention the perpetual motion is proposed, many hard labors performed, and varieties of motions and sounds produced. First written in French, by Isaak de Caus, and now translated into English, by John Leak. sm. fol. *London,* 1659.

CEILINGS, A book of. *See* **Richardson,** George.

CELTIC language. Norsk og Keltisk. *See* **Holmboe,** C. A.

CEMENT. Kalk, Gyps und Cement. *See* **Böhmer,** Emil, and **Neumann,** Friedrich. **28 Neuer Schauplatz der Künste.**

CEMENTS and materials. *See* PHILADELPHIA. **Internat exhib. 1876. Group 2.**

CERAMIC art. Maiolics. *See* **Fortnum,** C. Drury E. **South Kensington museum art and science handbooks, No. 4.**

CERAMICS. British manufacturing industries, v. 7.

——— Description méthodique du musée céramique, Sèvres. *See* **Brongniart,** A., and **Riocreux,** D.

CEREALS. Coltivazione dei cereali e foraggi. *See* **Rizzi,** Dominico.

——— exhibited, Report on. By G. S. Hazard. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

——— produced in different countries. By S. B. Ruggles. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

Chadwick, Edwin. Report on the sanitary condition of the laboring population of Great Britain. A supplementary report on the results of a special inquiry into the practice of interment in towns. Made at the request of her majesty's principal secretary of state for the home department. Presented to both houses of parliament, by command of her majesty. 8°. *London,* 1843.

Chalmers, Charles. Notes of experiments, with thoughts on electricity. 8°. *Edinburgh, London,* 1850. pp. 39.

CHAMPAGNE; its history, manufacture, etc. *See* **Tovey,** Charles.

CHANDELIERS, chalices, etc. [A collection of designs, drawn on a scale of half their original size.] *n. t. p.*

CHARCOAL burners, Handbook for. *See* **Svedelius,** G.

Charley, W. T. Flax and linen. **British manufacturing industries, v. 5.**

CHASING. Knight's scroll ornaments, for use of chasers, etc. *See* **Knight's.**

Chauveau des Roches, —, Belin, —, and **Vigreux, —.** Hydraulique appliquée. Appareils à élever l'eau, pour alimentation, irrigations, épuisements, utilisation, et descriptions des moteurs hydrauliques. 8°. *Paris, n. d.*

CHEESE. British manufacturing industries, v. 12.

——— Analysis of. *See* **Wanklyn,** J. A.

CHEMICAL analysis. Analysis of minerals. *See* **Accum,** F.

——— ——— Determination of minerals by the blowpipe. *See* **Fuchs,** C. W. C.

Digitized by Google

CHEMICAL analysis, Elementary manual of qualitative. *See* **Perkins**, Maurice.

—— —— Manual of qualitative. *See* **Elliott**, Charles W., and **Storer**, Frank H.

—— —— Manual of qualitative. *See* **Fresenius**, C. R.

—— industry. Chemische Industrie; von Goldschmidt. *See* PHILADELPHIA. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 7.**

—— —— Zeitschrift für das chemische Grossgewerbe. *See* **Post**, J.

—— materials, Report on. By W. Gibbs. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

—— products. Chemische Gross-Industrie. Von A. Bauer. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

—— —— Minor. **British manufacturing industries, v. 4.**

CHEMICALS. British manufacturing industries, v. 7.

CHEMISTRY. *See* PHILADELPHIA. **Internat exhib. 1876. Group 3.**

—— Aequivalentgetallen der scheikundige Grondstoffen. *See* **Van Geuns**, W. A. J.

—— Agricultural and geological. *See* **Johnston**, James F. W.

—— Die Alkalien. *See* **Pick**, S.

—— Die anorganische Chemie. *See* **Loth**, J.

—— applied to the arts, etc. *See* **Pharmaceutical times.**

—— Atlas zum chemischen Laboratorium. *See* **Liebig** and **Voit.**

—— The birth of. *See* **Rodwell**, G. F. **Nature series.**

—— by experiment, The first principles of. *See* **Thompson**, Thomas.

—— A catechism of practical. *See* **Irving**, C.

—— Chemical re-agents or tests. *See* **Accum**, F.

—— Chemical technology. *See* **Ronalds**, Edmund, and **Richardson**, Thomas.

—— Chemisch-trockene Reinigung. *See* **Drösse**, Hermann.

—— Das chemische Grossgewerbe. *See* **Post**, Julian.

—— Das chemische Laboratorium der Universität Christiania. *See* CHRISTIANIA. **Norske** Universität.

—— The chemist. *See* **Guide** to trade.

—— A dictionary of. *See* **Ure**, Andrew.

CHEMISTRY, Dictionary of. *See* **Watts**, Henry.

—— Dictionary of. Chemisches Handwörterbuch. *See* **Dammer**, Otto.

—— Einführung in das Studium der Chemie. *See* **Schiff**, Hugo. Bibl. der Wissensch. und Literatur, 10. B.: Naturwissensch. Abth., 1. B.

—— The elaboratory laid open. *See* **Elaboratory.**

—— Elementos de química. *See* **Youmans**, Edward L.

—— Éléments de chimie. *See* **Sacc**, Frédéric.

—— The elements of experimental. *See* **Henry**, William.

—— First principles of. *See* **Renwick**, James.

—— Fortschritte der technischen Chemie. *See* **Fortschritte.**

—— Fownes' manual of. *See* **Fownes**, George.

—— Geometrical. *See* **Wurtz**, Henry.

—— Grundriss der chemischen Technologie. *See* **Post**, Julius.

—— Industrial. Chemische Industrie. Von Adolf Lieben. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

—— —— Report on. By J. Lawrence Smith. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 2.**

—— Inorganic and organic. *See* **Roscoe**, H. E.

—— —— Handbuch der anorganischen Chemie. *See* **Gmelin**, Leopold, and **Kraut**, Karl.

—— —— A manual of. *See* **Eliot**, C. W., and **Storer**, F. H.

—— Institutiones chemiae. *See* **Spielmann**, J. Reinbold.

—— Introduction to chemical physics. *See* **Pynchon**, T. R.

—— Introduction to the study of chemical philosophy. *See* **Tilden**, William A.

—— Lehrbuch der Gährungs-Chemie. *See* **Mayer**, Adolf.

—— Natural and chemical philosophy. *See* **Leslie**, John.

—— of common life. *See* **Johnston**, J. F. W.

—— of feeding, for the production of meat and manure. *See* **Lawes**, J. B.

—— of the farm and the sea. *See* **Nichols**, James R.

Digitized by Google

CHEMISTRY of the stars. *See* **Wilson,** George. Electricity, etc.

——— of the workshop. Chemie für Metallarbeiter. *See* **Schmidt,** F. X.

——— Organic. Nouveau système de chimie organique. *See* **Raspail,** F. V.

——— ——— Traité de chimie organique. *See* **Fittig,** R.

——— Outlines of lectures on. *See* **Torrey,** John.

——— Principles and applications of. *See* **Wells,** David A.

——— Qualitative chemical analysis. *See* **Eliot,** Charles W., and **Storer,** Frank H.

——— Qualitative chemical analysis. *See* **Perkins,** Maurice.

——— Report on chemicals. By J. Lawrence Smith. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

——— Ubestemte chemiske forbindelser. *See* **Guldberg,** C. M.

CHEMITYPE printing, Plea for the introduction of. *See* **Donlevy,** John.

CHEMNITZ. Gewerbschule. Programm. K. Gewerb- und Baugewerkenschule zu Chemnitz. Schuljahr 1847-76. 4°. *Chemnitz,* 1847-76.

——— Handels-Lehranstalt. Einladungsschrift zur Prüfung der Schüler, 1866-76. 8°. *Chemnitz,* 1866-76.

Chemnitz, M. F. Der polytechnische Verein zu Würzburg. Festgabe, nach den Akten von. *See* WÜRZBURG. **Polytechnischer Verein.**

Chesbrough, E. S., and **Durant,** C. F. Letters on hydraulics, on the physical laws that govern running water, applied to a dam and mill privilege on the Housatonic river at Great Bennington, Mass. *Illus.* 8°. *New York,* 1849.

Chevalier, Michel. Rapports du jury international. Exposition universelle de 1867, à Paris; publiés sous la direction de. T. 1-13. 8°. *Paris,* 1868.

Chevandier, E., and **Wertheim,** G. Die mechanischen Eigenschaften des Holzes. Eine Abhandlung vorgelegt der Akademie der Wissenschaften in Paris, von. Revidirt und übersetzt von Wilhelm Franz Exner. 1. Hälfte. *Illus.* 8°. *Wien,* 1871. **B. 1. Exner's mechanische Technologie des Holzes.**

CHILDREN, Books for. Petite encyclopédie des enfans. *See* **Petite.**

CHILDREN, Clothes for. Fertige Kleider. Kinder-Kleider. Von Josef Migotti. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— Diseases of. Cours d'accouchemens et de maladies des femmes et des enfans. *See* **Hatin,** Jules.

——— Employment of, in mines. *See* GREAT BRITAIN. Children's employment commission.

——— Pavillon des kleinen Kindes Ferd. Stamm. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

——— Wasting diseases of. *See* **Smith,** Eustace. **Medical news lectures, v. 3.**

CHILI. Report on minerals and mineral waters of Chile. *See* **Smith,** J. Lawrence.

CHINA. The Canton Chinese. *See* **Tiffany,** Ormand, *jr.*

Chippendale, —. Ornaments and interior decorations in the old French style; consisting of hall-glass and picture frames, chimney pieces, etc., for carvers, modellers, etc. l. 4°. *London, n. d.*

Chisholm, W. On the science of weighing and measuring, and standards of measure and weight. *Illus.* sm. 8°. *London,* 1877. **Nature series.**

CHOLERA, The Asiatic. *See* **Sonden,** C. U.

——— in Paris, Report on. *See* **Report.**

——— in the Orient. *See* **Cricca,** A.

——— its history, course, and treatment. *See* **Smith,** R. P.

——— its nature, prevention and treatment. *See* **Hartshorne,** Henry.

——— Nature, prevention and cure of. *See* **Schieferdecker,** C. C.

——— Pathology and treatment of Asiatic. *See* **Cox,** A. L.

——— pestilence, The. *See* **Merrill,** A. P.

——— Report on the epidemic of 1873. *See* UNITED STATES. **Congress.**

——— Schutz wider die Cholera. *See* **Herzog** and **Pfeufer.**

Chorlton and **Ardwick.** Manchester free libraries. Catalogue of the lending branch. *See* MANCHESTER.

Christian IV, of Denmark. Kong Christian den fjerdes norske lovbog af 1604. *See* NORWAY.

CHRISTIANIA. Norske Universitet. Das chemische Laboratorium der Universität Christiania und die darin ausgeführten chemischen Untersuchungen. Auf Veranlassung des academischen Col-

Digitized by Google

CHRISTIANIA—Continued.
legiums, hrsg. von Adolf Strecker. Universitäts-Programm für das 2te Halbjahr 1864. 4°. *Christiania*, 1854.

——— ——— Das Christiania-Silurbecken. *See* **Kjerulf**, Theodor.

——— ——— Jaettegryder. *See* **Sexe**, S. A. Universitets-programm, 1874, 1ter.

——— ——— Kong Christian den fjerdes Norske lovbog af 1604. *See* NORWAY.

——— ——— Maerker efter en iistid. *See* **Sexe**, S. A. Universitetsprogramm, 1866, 1ter.

——— ——— Le névé de Justedal et ses glaciers. *See* **Seue**, C. de.

——— ——— Om de i Norge forekommende fossile dyrelevninger fra quartaerperioden. *See* **Sars**, Michel.

——— ——— Norsk og Keltisk. *See* **Holmboe**, C. A.

——— ——— Det Oldnorske verbum, oplyst ved sammenligning med Sanskrit. *See* **Holmboe**, C. A.

——— ——— Die Pflanzenwelt Norwegens. *See* **Schübeler**, F. C.

——— ——— Saga Olafs konungs ens helga. *See* **Sturlasson**, Snorre.

——— ——— Om skuringsmaerker, glacialformationen, etc. *See* **Kjerulf**, Theodor.

——— ——— Syphilisationen, studeret ved sygesengen. *See* **Boeck**, Wilhelm.

——— ——— Windrosen des südlichen Norwegens. *See* **Seue**, C. de.

——— Observatorium. Meteorologische Beobachtungen aufgezeichnet auf. 1837–64. 8°. *Christiania*, 1862–65.

CHROMO-lithography. Farbendruck auf der Steindruckpresse. *See* **Neubürger**, Ferdinand.

CHRONOGRAPH, used to determine more than one velocity in the same trajectory. Francisco Zavier Zapata. *See* UNITED STATES. **Navy dept. Ordnance papers.**

CHRONOLOGY, The Polish-American system of. *See* **Peabody**, Elizabeth P.

Church, *Prof.* Acids, alkalies, soaps, etc. **British manufacturing industries, v. 4.**

CHURCH architecture, Chapel and. *See* **Bowler**, George.

CIVIL engineering, Report on. By W. Watson. *See* UNITED STATES. **State dept. Report Vienna exhib. 1873, v. 3.**

Clark, Daniel. Practical principles of medical electricity. 18°. *Joliet*, 1866.

Clark, Daniel Kinnear. Railways and tramways. **British manufacturing industries, v. 10.**

Clark, George Sydenham. Practical geometry and engineering drawing. *Illus.* 4°. *London*, 1875.

Clark, John. Second book of drawing. *Illus.* 18°. *Edinburgh*, 1853.

Clarke, Arthur. An essay on warm, cold and vapour bathing; with practical observations on sea-bathing, diseases of the skin, bilious, liver complaints and dropsy. 12°. *London*, 1819.

CLASSICAL and scientific studies, and the great schools of England. *See* **Atkinson**, W. P.

Claus, C. Beobachtungen über Lernæocera, Peniculus und Lernæa. Beitrag zur Naturgeschichte der Lernæen. *Illus.* 8°. *Marburg und Leipzig*, 1868.

CLAYS and materials. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 2.**

——— Fire-proof, Die feuerfesten Thone. *See* **Bischof**, Carl.

——— Thonwaaren-Industrie. Von Emil Teirich. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 13.**

Cleaveland, H. W., **Backus**, William, and **Backus**, Samuel D. Village and farm cottages. The requirements of American village homes considered and suggested; with designs for such houses of moderate cost. 8°. *New York*, 1866.

——— ——— ——— Working drawings for the designs published in village and farm cottages. fol. *New York and Chicago*, 1857.

Clifton, Francis. Hippocrates upon air, water and situation; upon epidemical diseases; and upon prognosticks, in acute cases especially. To this is added (by way of comparison) Thucydides's account of the plague of Athens. The whole translated, methodised and illustrated with useful and explanatory notes. sm. 8°. *London*, 1734.

CLOCK business, History of the American; Barnum's connection with the Yankee. *See* **Jerome**, Chauncey.

CLOCKS. British manufacturing industries, v. 11.

Digitized by Google

CLOTH finishing. Appreturmittel und Harzprodukte. Von Wilhelm F. Gintl. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 3.**

—— Weberei des Tuch- und Buckskinfabrikanten. *See* **Stommel**, Cuno.

CLOTHING. British manufacturing industries, v. 13.

—— *See* PHILADELPHIA. **Internat. exhib. 1876. Group 10.**

—— Fertige Kleider. Frauenkleider und Costüme. Von Ignaz Ortmann. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

—— Machines, apparatus, implements, used in making. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 22.**

—— Männerkleider und Kostüme. Von Anton Kreuzig. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

—— Ready-made. Fertige Kleider. Von Ignaz Ortmann, etc. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

—— Report on. By P. Steven-. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 6.**

CLOUDS, Prediction of storms by means of. *See* **Blasius**, William.

COAL. British manufacturing industries, v. 2.

—— agglomerated, manufacture of, Report on. By H. F. Q. D'Aligny. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

—— Bergbau und Hüttenwesen. Mineralische Kohle. Von J. Pechar und A. Peez. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 1.**

—— gas, Manufacture and distribution of. *See* **Richards**, William.

—— A history of, coke, etc. *See* **Fordyce**, W.

—— mines, Gases in. *See* **Atkinson**, J. J. **Van Nostrand's science series, No. 13.**

—— Pennsylvania geological survey. *See* PENNSYLVANIA.

—— tar colors, Chemistry of. By A. A. Fesquet. *See* **Napier**, James. Chemistry applied to dyeing.

—— Working. Kohlen-Hau-, Fräs- oder Schrämm-Maschinen. *See* **Simon**, Heinrich.

Cobb, B. F. Silk. **British manufacturing industries, v. 5.**

Cobden, Richard, Teachings of. *See* **Cobden club publications, No. 1.**

—— Russia, Turkey and England; by. **Cobden club publications No. 5.**

Cobden club. Publications. Nos. 1–6. 12°. *London*, 1871–76.

CONTENTS.

No. 1. Mr. Grant Duff on the teachings of Richard Cobden. 1871.
2. Free trade and free enterprise. Speech of D. A. Wells, on protection in the United States, etc. 1873.
3. Report of proceedings at the dinner of the Cobden club, July 11, 1874.
4. Free trade and the European treaties of commerce. 1875.
5. Russia, Turkey and England. By Richard Cobden. 1876.
6. The history of free trade in Tuscany. By J. M. Stuart. 1876.

Cockerill, John. Portefeuille de; ou description des machines construites dans les établissements de Seraing, depuis leur fondation jusqu'à ce jour. Publié avec l'autorisation de la société Cockerill. Avec atlas du portefeuille. Année 1859–64. 4°. *Paris et Liège*, 1859–64.

Codazza, Giovanni. Alcuni punti della teoria della costruzione dei generatori di vapore. Memoria. *Milano*, 1861.

—— Polarizzazione rotatoria della luce sotto l'influenza della azione elettro-magnetiche. Memoria prima e seconda. *Milano*, 1853.

Coddington, Charles E. A digest of the law of trademarks as presented in the reported adjudications of the courts of the United States, Great Britain, Ireland, Canada, and France, from the earliest period to the present time; together with an appendix containing the United States statutes, and the treaties of the United States concerning trademarks, and the rules and forms of the United States patent office for their registration. 8°. *New York*, 1878.

Coetlogen, Dennis de. A universal history of arts and sciences; or a comprehensive illustration, definition and description of all sciences, divine and human; and of all arts, liberal and mechanical. The origin and progresses of religions, sects, heresies, and schisms; the description of all countries, the different systems of philosophers, the his-

Digitized by Google

Coetlogon, Dennis de—Continued.
tory of all orders, religious and military; with curious and entirely new treatises on the duties of embassadors and plenipotentiaries. The whole extracted from the best authors in all languages, and enriched with the new systems, hypotheses, maxims, and reflections of the author. 2 v. fol. *London*, 1745.

Cohen, J. Solis. Inhalation; its therapeutics and practice. A treatise on the inhalation of gases, vapors, nebulized fluids and powders, etc. With cases. *Illus.* 8°. *Philadelphia*, 1867.

Cohn, Carl, **Newald,** J., and **Haas,** Carl. Beleuchtungsapparate. Waffen. Metallwaaren. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 7.**

COIGNET-béton. *See* **Béton-coignet.**

COINS, Catalogue of books on. *See* **Pollen,** J. H.

——— Metrical pocket-book, or, manual of weights, measures and coins. *See* **Dalmon,** H.

Colburn, Dana P. The decimal system of numbers; illustrated and practically applied. 12°. *Boston*, 1852. Another ed., 1853.

Colburn, Zerah. Engineering; conducted by. *See* **Engineering.**

——— Steam boiler explosions. 18°. *New York*, 1873. **Van Nostrand's science series, No. 2.**

Collection of reports, (condensed), and opinions of chemists in regard to the use of lead pipe for service pipe in the distribution of water for the supply of cities. 8°. *New York*, 1859.

Collier, Peter. Report on commercial fertilizers. *See* UNITED STATES. **State dept. Reports Vienna exh. 1873, v. 2.**

COLLIERIES. British manufacturing industries, v. 2.

Collins, J. Guttapercha and indiarubber. **British manufacturing industries, v. 9.**

——— Hides and leather. **British manufacturing industries, v. 9.**

Collins, Lewis. Historical sketches of Kentucky. 8°. *Maysville, Cincinnati*, 1847.

COLORADO of the West, Exploring expedition to. *See* UNITED STATES. **War dept. Bureau of engineers.**

——— river, Exploration of. *See* **Powell,** J. W.

COLORS. Colours original, prismatic and material. *See* **Sowerby,** James.

Colton, George W. Atlas of the world, illustrating physical and political geography; accompanied by descriptions geographical, statistical and historical, by Richard S. Fisher. v. 1. North and South America, etc. 2. Europe, Asia, Africa, Oceanica, etc. fol. *New York*, 1856.

Colton, Walter. Three years in California. *Illus.* 12°. *New York*, 1850.

Colwell, *Prof.* A practical system of horse training. 18°. *Peoria, Ill.*, [1868].

Combe, Taylor. A description of the collection of ancient terra-cottas in the British museum. *Illus.* 4°. *London*, 1810.

COMBUSTION, and best means to extinguish fire. *See* **Inman,** T.

——— with a view to a new art of dyeing and painting. *See* **Fulhame,** *Mrs.*

COMMERCE, arts and sciences of the antients. *See* **Rollin,** Charles.

——— The commercial and financial chronicle. *See* **Commercial.**

——— De Bow's commercial review. *See* **De Bow,** James D. B.

——— Instituzioni di diritto commerciale. *See* **Alianelli,** Niccola.

——— Transactions of the Society for encouragement of. *See* LONDON. **Society.**

——— Welthandel. Von Karl T. Richter. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 20.**

Commercial (The) and financial chronicle, and Hunt's merchant's magazine; a weekly newspaper, representing the industrial and commercial interests of the United States. v. 22–25. fol. *New York*, 1871–72.

COMMISSARY. Heeresverpflegungswesen. Von Alexander Poppović. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 16.**

Complete (The) grocer; being a series of valuable receipts for distilling and mixing cordials of all kinds; brandy, rum, and gin; by an old distiller. 8°. *New York*, 1832.

Digitized by Google

COMPOUND engines. *See* **Mallet, A. Van Nostrand's science series, No. 10.**

——— steam engine and method of finding the relative areas of the two cylinders. *See* **Turnbull, John, *jr*. Van Nostrand's science series, No. 8.**

Comstock, Andrew. Phonetic New Testament. 8°. *Philadelphia*, 1848.

Comstock's phonetic magazine. v. 1. 8°. *Philadelphia*, 1846.

CONCRETES, Observations on. By J. G. Totten. *See* **Treussart, —, Petot, —,** and **Courtois, —.**

CONFECTIONERY. Zuckerbäckerei, Conditen und Chocolade. Von A. Gerstner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

CONFEDERATE STATES [so called]. Patent office. Report of the commissioner to the house of representatives, C. S. A., of the patents granted during the year 1863. 8°. *Richmond*, 1864. *n. t. p.*

CONIC sections, Elements of geometry and. *See* **Loomis**, Elias.

CONSERVES. Conserven, Extracte, und Fleischwaaren. Von Carl Wahanek. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 4.**

CONSTRUCTION. Graphical statics and their application to framed structures. *See* **Du Bois, A. J.**

——— of skew arches. *See* **Hyde, E. W. Van Nostrand's science series, No. 15.**

——— Report on materials of. By N. L. Derby. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

CONTINUOUS bridges. *See* **Bender, Charles. Van Nostrand's science series, No. 26.**

Converse, G. A. Notes on torpedo-fuzes. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Cooke, William Fothergill. The electric telegraph. Was it invented by Prof. Wheatstone? 8°. *London*, 1854.

——— The electric telegraph. Was it invented by Prof. Wheatstone? A reply to Mr. Wheatstone's answer. 8°. *London*, 1856.

COOKERY, Household encyclopædia of. *See* **Haskell, E. F.**

Cooper, C. C. Identities of light and heat, of caloric and electricity. 8°. *New York*, 1848.

Cooper, John H. A treatise on the use of belting for the transmission of power. 8°. *Philadelphia*, 1878.

COOPERING. The cooper. *See* **Guide** to trade.

Cope, Edward D. Check-list of North American batrachia and reptilia; with a systematic list of the higher groups, and an essay on geographical distribution. Based on the specimens contained in the United States national museum. 8°. *Washington*, 1875. *See* UNITED STATES. **Interior dept. National museum. Bull. 1.**

——— On the hypothesis of evolution; physical and metaphysical. 12°. *New Haven*, 1870. **University series, No. 4.**

——— The vertebrata of the cretaceous formations of the west, Report of. *See* UNITED STATES. **Interior dept. Geolog. survey of the territories. F. V. Hayden. v. 2.**

Coppée, Henry. Elements of logic, designed as a manual of instruction. 12°. *Philadelphia*, 1858.

COPPER and steel prints. Kupfer- und Stahlstichdruck. Von Louis Jacobi. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 12.**

——— mines, The Lake Superior country and. *See* **St. John**, John R.

——— plate. Kupferstich-Sammlung des polytechnischen Vereins zu Würzburg. *See* WÜRZBURG.

——— smelting. **British manufacturing industries, v. 1.**

CORDAGE. British manufacturing industries, v. 9.

Corfield, W. H. Sewerage and sewage utilization. 18°. *New York*, 1875. **Van Nostrand's science series, No. 18.**

——— Water and water supply. 18°. *New York*, 1875. **Van Nostrand's science series, No. 17.**

CORK and wickerwork. Kork und Korbflechterwaaren. Von Carl Kohn. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 8.**

Cornelissen, J. E. Temperature of the sea at the surface, near the south point of Africa. 4°. *Utrecht*, *n. d.* **Royal** meteorological institute of the Netherlands.

CORNICE work. Gesimse. *See* **Musterzeichnungen, etc.**

Digitized by Google

CORPORATIONS, manufacturing, Laws of Massachusetts in relation to. *See* **Batchelder**, Samuel.

CORROSION, On boiler incrustation and. *See* **Rowan**, F. J. **Van Nostrand's science series, No. 27.**

COSMETICS, pastils, tooth powders, and washes, etc. *See* **Cristiani**, R. S.

COTTAGES, Village and farm. *See* **Cleaveland**, H. W., etc.

COTTON. Baumwolle und Baumwollwaaren. Von Alex. Peez. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

——— **British manufacturing industries, v. 5.**

——— fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 8.**

——— Report on. By Mudge and Nourse. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 6.**

——— spinning. Baumwollen-Spinnerei im Sachsen. *See* **Engel**, Ernst.

Coues, Elliott. Fur-bearing animals. A monograph of North American musteli-dæ. *See* UNITED STATES. **Interior dept. Geolog. survey of the territories. F. V. Hayden. Misc. publications, No. 8.**

——— and **Allen**, Joseph Asaph. Monographs of the North American rodentia. *See* UNITED STATES. **Interior dept. Geolog. and geograph. survey of the territories. F. V. Hayden. v. 11.**

Coulthard, H. C. Blast engines; containing plates to scale of large working drawings, with letterpress description. l. fol. *London*, 1867.

Cowdin, Elliot C. Report on silk. *See* UNITED STATES. **Stat dept. Reports Paris exp. 1867, v. 6.**

Cowley, John Lodge. Geometry made easy; or, a new and methodical explanation of the elements of geometry. Containing a commentary on Euclid; a compendious treatise on algebra; a collection of recreative proverbs; an introduction to conic sections. 8°. *London*, [1752].

Cox, A. L. The pathology and treatment of Asiatic cholera; so called. 12°. *New York*, 1849.

CRAVATS and neckties. Fertige Kleider. Cravaten und Halsbinden. Von Josef Migotti. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 5.**

Crawford bronze door, at the Capitol. *See* **Wyeth**, S. D.

CREAM, Analysis of. *See* **Wanklyn**, J. A.

Cricca, A. Cholera in the Orient, and its successful treatment. 8°. *Chicago*, 1868. pp. 35.

Cristiani, R. S. Perfumery and kindred arts. A comprehensive treatise; containing a history of perfumes, a complete, detailed description of the raw materials and apparatus used in the perfumer's art; with thorough practical instructions, careful formulæ, and advice as to the fabrication of all the best preparations of the day; including essences, tinctures, extracts, spirits, waters, vinegars, pomades, powders, paints, oils, emulsions, cosmetics, infusions, pastils, tooth powders, and washes, cachous, hair dyes, sachets, essential oils, flavoring extracts, etc.; and full details for making and manipulating fancy toilet soaps, shaving creams, etc., by new and improved methods. With an appendix, giving directions for making domestic wines, cordials, liquors, candies, jellies, syrups, etc., and perfuming and flavoring segars, snuff and tobacco, and miscellaneous recipes for various useful analogous articles. 8°. *Philadelphia*, 1877.

Cristoforis, Luici. Relazione sopra alcune machine all'esposizione di Londra, del 1851. 8°. *Milano*, 1852.

Crosby, Frank. Everybody's lawyer and counsellor in business; containing plain and simple instructions to all classes for transacting their business according to law, with legal forms for drawing the various necessary papers connected therewith, together with the laws of different states for collection of debts. 12°. *Philadelphia*, [1859].

CUBA, The stranger in the tropics; a guide for travellers in. *See* **Tyng**, C. D.

Culmann, C. Gleichgewichtsbedingungen der Erdmassen. *Illus.* 8°. *Zürich*, 1856.

Culpeper, Nicholas. A directory for midwives; or, a guide for women, in their conception, bearing and suckling their children. 12°. *Belfast*, 1766.

Culverwell, Robert James. Guide to health and long life; or what to eat, drink and avoid, what exercise, how to

Digitized by Google

Culverwell, Robert James—Continued. control and regulate the passions and appetites; and on the general conduct of life, etc. To which is added a popular exposition of Liebig's theory of life, health and disease. 12°. *New York*, 1867,

Curioni, Giulio. Come la geologia posse concorrere più dirittamente ai progressi delle industrie. 8°. *Milano*, 1857.

——— Schisti bituminosi di tignale sul lago di Garda. 8°. *Milano*, 1854.

Curtis, George Ticknor. A treatise on the law of patents for invention, as enacted and administered in the United States of America. 1st ed. 1849; 2d, 1854; 3d, 1867; 4th, 1873. 8°. *Boston*, 1849–73.

CURVES of light rays. Ueber catacaustische Curven oder Brennlinien durch Zurückwerfung. *See* **Catacaustische.**

CUTLERY. British manufacturing industries, v. 11

——— *See* PHILADELPHIA. **Internat. exhib. 1876. Group 15.**

——— Catalogue of. *See* Lockwood brothers.

Cutts, R. D. Reports on instruments of precision. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Cuyler, J. Y. The sanitarian; ed. by. *See* **Sanitarian.**

CYCLOMETER; a new instrument. *See* **Adamson,** W.

CYLINDERS, New method for finding the areas of the two, in compound steam engine. *See* **Turnbull,** John, *jr.* **Van Nostrand's science series, No. 8.**

Dadd, George H. The modern horse doctor; containing practical observations on the causes, nature, and treatment of disease and lameness in horses, etc. *Illus.* 12°. *Boston*, 1854.

Dagley, Richard. A compendium on the theory and practice of drawing and painting, etc. To which is added the practice of the pencil, chalk, tinted and water colour drawing. *Illus.* 4°. *London*, 1822.

Dagnall, John M. The history and uses of the Ignatia amara; or St. Ignatius' bean, from several authors; with remarks on its peculiar properties, in removing general nervous debility, and various painful and irritable conditions of the nervous system. 12°. [*New York*, 1856.] pp. 11.

Daily, M. H. The farmers', liverres' and teamsters' guide, for handling, riding and driving wild and vicious horses. 12°. *Indianapolis*, 1867.

DAKOTA, Explorations in, 1855–57. *See* **Warren,** G. K. UNITED STATES. **War dept. Bureau of engineers.**

D'Aligny, Henry F. Q. Manufacture of beet-root sugar and alcohol; of pressed or agglomerated coal; photographs and photographic apparatus; history of the Atlantic cables. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 5.**

——— Report on mining and preparation of ores. *See* UNITED STATES. **State dept. Reports Paris exp. 1867, v. 4.**

Dall, W. H. Index to the names which have been applied to the subdivisions of the class Brachiopoda, excluding the Rudistes, previous to the year 1877. 8°. *Washington*, 1877. *See* UNITED STATES. **Interior dept. Nat. museum. Bull. 8.**

——— Tribes of the extreme northwest. *See* UNITED STATES. **Interior dept. Geogr. and geol. survey of Rocky Mountain region. J. W. Powell. v. 1.**

Dalmon, H. Metrical pocket-book; or, manual of weights, measures and coins, the principles of the metric system; scales and tables for the reduction of all the metric, English and United States standards; etc. 18°. *Philadelphia*, 1870.

Daly, César. Revue générale de l'architecture et des travaux publics. T. 1–33 1840–76. 4°. *Paris*, 1840–76——.

Dambourney (*Citoyen*). Recueil de procédés et d'expériences sur les teintures solides que nos végétaux indigènes communiquent aux laines et aux lainages. 8°. *Paris, An. 2° de la République*, [1793-94].

Dammer, Otto. Kurzes chemisches Handwörterbuch. 8°. *Berlin*, 1876.

DAMS. De afdamming van het Sloe. *See* **Neyt,** P. J.

——— High masonry. *See* **McMaster,** John B. **Van Nostrand's science series, No. 22.**

Dana, William B. Hunt's merchant's magazine; ed. by. *See* **Hunt,** Freeman.

DANTZIC. Wasserleitung, Canalisation und Rieselfelder von Danzig. Mit Plan der Stadt und Umgegend. 12°. *Danzig*, 1876.

Digitized by Google

Danvers, Frederick Charles. India. 8°. *London*, 1877.

Davenport, Samuel. Engraving. **British manufacturing industries, v. 8.**

Davidson, R. O. A new theory of the flight of birds. 8°. *Washington*, 1858. pp. 28.

Davies, Charles. The metric system explained and adapted to the systems of instruction in the United States. 12°. *New York*, 1867. pp. 20.

Davis, Charles. Report on hydraulic engineering. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 3.**

Davis, J. B. A popular manual on the art of preserving health; embracing the subjects of diet, air, exercise, gymnastics, general and physical education, occupations, bathing, clothing, ventilation, etc. 8°. *London*, 1836.

Dawes, Richard. Lessons on the phenomena of industrial life, and the conditions of industrial success. 18°. *London*, 1854.

Day, St. John V. The prehistoric use of iron and steel: with observations on certain matters ancillary thereto. 8°. *London*, 1877.

DEAF and dumb, Articulation for. *See* **Baker,** Charles.

——— mute instruction, Report on. By E. M. Gallaudet. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Decaisne, J. Jardin fruitier du muséum, ou iconographie de toutes les espèces et variétés d'arbres fruitiers cultivés dans cet établissement. *n. t. p.*

DECIMAL system of measures, weights and money. *See* **Mann,** W. W.

DECORATION, Catalogue of books on. *See* **Pollen,** J. H.

——— The decorative arts, ecclesiastical and civil, of the middle ages. *See* **Shaw,** Henry.

DEFENCE. Report on the fabrication of iron for defensive purposes. By J. G. Barnard. *See* UNITED STATES. **War dept. Prof. papers on pract. eng., No. 21.**

Delaistre, J. R. Encyclopédie de l'ingénieur, ou dictionnaire des ponts et chaussées. T. 1–3. 8°. *Paris*, 1812.

Delambre, J. B. J. Tables trigonométriques décimales, ou tables des logarithmes, des sinus, sécantes et tangentes, et tables des logarithmes des nombres, et tables subsidiaires. 8°. *Paris, An. 9 de la République*, [1800].

Demmin, August. Handbuch der bildenden und gewerblichen Künste. Geschichtliche, archäologische, biographische, chronologische, monogrammatische, und technische Encyclopaedia. Unter Mitwirkung des Verfassers ins Deutsche übertragen von Oscar Mothes. *Illus.* B. 1. 8°. *Leipzig, n. d.*

De Morgan, Augustus. An essay on probabilities, and on their application to life contingencies and insurance offices. 24°. *London*, 1838.

Dempsey, G. Drysdale. Examples. [No. 1.] Of iron bridges for railways, etc.; [2.] Brick bridges, sewers and culverts for roads, railways, etc.; [3.] Trussed bridges and viaducts for supporting railways, etc.; [4.] Iron roofs of various spans for buildings; accompanied by descriptive text. fol. *London. n. t. p.*

——— The machinery of the nineteenth century. Illustrated from original drawings, and including the best examples shown at the exhibition of the works of industry of all nations. Parts 1–6, 1852. 4°. *London*, 1852.

Dent, Edward J. A description of the dipleidoscope, or double-reflecting meridian and altitude instrument. 8°. *London*, 1843. pp. 24.

Dental (The) advertiser; a quarterly journal. v. 8, 1877. 8°. *Buffalo, N. Y.*, 1877——.

DENTISTRY. Dental advertiser. *See* **Dental.**

——— Traité historique et pratique sur les dents artificielles incorruptibles. *See* **Audibran,** Joseph.

Derby, George. An inquiry into the influence upon the health of anthracite coal, when used as fuel for warming dwelling houses; with some remarks upon special evaporating apparatus. 18°. *Boston*, 1868.

Derby, Nelson L. Report on architecture and the materials of construction. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

Digitized by Google

DESIGN, Magazine of. *See* **Art**-workmanship.

——— Studies in. *See* **Dresser**, C.

DESIGNS. Collection des dessins distribués aux élèves. *See* PARIS. **École** impériale, etc.

——— for ornamental plate from original drawings. *See* **Tatham**, C. Heathcote.

Despretz, C. Traité élémentaire de physique. 4e éd. revue, augmentée. *Illus.* 8°. *Paris*, 1836.

De Vinne, Theodore L. The invention of printing; a collection of facts and opinions descriptive of early prints and playing cards, the block-books of the fifteenth century, the legend of Laurens Janszoon Coster, of Haarlem, and the work of John Gutenberg and his associates. 2d ed. *Illus.* 8°. *New York*, 1878.

Dewy, Melvil. A classification and subject index for cataloguing and arranging the books and pamphlets of a library. 8°. *Amherst, Mass.*, 1876.

DICTIONARY. English-deutsches und deutsch-englisches Handwörterbuch. *See* **Köhler**, Friedrich.

——— English-Latin, and Linguæ latinæ dictionarium. *See* **English**-Latin.

——— of chemistry. *See* **Watts**, Henry.

——— of chemistry and mineralogy. *See* **Ure**, Andrew.

——— (A) of engineering terms in German-English and English-German. [Supplement to the Engineer of Jan. 29, 1869.] 8°. *London*, 1869.

——— A rhyming, spelling and pronouncing, of the English language. *See* **Walker**, J.

Dictionnaire pour la correspondance télégraphique secrète, précédé d'instructions détaillées et suivi de la convention télégraphique internationale conclue à Paris le 17 mai 1865. Par un secrétaire de légation. 18°. *Paris*, 1867.

Diggelen, B. P. G. v. Verhandeling over de verbetering van het zwolsche Diep. 8°. *Zwolle, n. d.*

Dillingham, John. Bee-keeper's companion, and domestic economy of the honey-bee. 32°. *Lewiston, Me.*, 1853.

Dini, F. Memoria sulla vinificazione. 8°. *Milano*, 1865.

DIPLEIDOSCOPE, Description of the. *See* **Dent**, E. J.

DIRECTORY, Binghamton, 1857. *See* **Wilson**, H.

——— Brooklyn city and business. 1876. *See* **Lain**, G. T.

——— Elmira, 1857. *See* **Wilson**, H.

——— Hudson, 1857. *See* **Wilson**, H.

——— Newburgh, 1856–57. *See* **Wilson**, H.

——— New England business. *See* NEW ENGLAND.

——— Pennsylvania State business. *See* **Reilly's**.

——— Wilmington, 1857–1866–67. *See* WILMINGTON.

——— Woburn, 1868. *See* WOBURN.

DISEASES of cattle and sheep. *See* **Wildesen**, Samuel.

DISINFECTANTS. Moyens de désinfecter l'air. *See* **Guyton-Morveau**, L. B.

Dislère, M. P. The iron clad ships of the world. Transl. by R. W. Meade. 4°. *Washington*, 1875. pp. 29.

DISTILLATION. **British manufacturing industries, v. 12.**

——— The art of; or the choisest spagyricall preparations. *See* **French**, John.

——— Fabricant d'alcool et du distillateur. *See* **Basset**, N.

——— Guide du fabricant d'alcools et du distillateur. *See* **Basset**, N.

DISTRICT OF COLUMBIA, Digest of the laws of the. *See* **Thompson**, M.

Dodge, Charles R. Field and forest; ed. by. *See* **Field** and forest.

Dodge, J. R. Report on sheep and wool. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 1.**

DOMESTIC economy. Économie du ménage. *See* **Gerardi**, F.

Donald, R. A chapter on English architecture. *See* **Lefebre**, M. **Illus. library of wonders, v. 15.**

Donlevy, John. Plea for the introduction of chemitype printing as a primary element of industrial training, adapted to combine physical with mental and moral education. 8°. *New York*, 1848.

Doremus, C. A. Report on photography. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 2.**

Dove, H.W. Verbreitung der Wärme auf der Oberfläche der Erde, erläutert durch Isothermen, thermische Isanomalen und Temperaturcurven. *Illus.* 4°. *Berlin*, 1852.

Digitized by Google

Downing, Samuel. Elements of practical hydraulics, for the use of students in engineering and architecture. Part 1. 3d ed. rev. *Illus.* 8°. *London*, 1875.

Dowson, J. Emerson, and **Dowson,** Alfred. Tramways; their construction and working. *Illus.* 8°. *London*, 1875.

Doyle, Martin. Catechisms of gardening and cottage farming. 24°. *London, n. d.*

DRAINING. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 14.**

——— Landwirthschaftlicher Wasserbau. *See* **Perels,** Emil.

DRAWBRIDGES, Continuous revolving. *See* **Herschel,** Clemens.

DRAWING and painting. *See* **Sanderson,** William.

——— and painting, Theory and practice of. *See* **Dagley,** Richard.

——— Geometrical. General problems of shades and shadows. *See* **Warren,** S. E.

——— ——— A text book of. *See* **Minifie,** William.

——— Grammigraphia, or the grammar of. *See* **Robson,** William.

——— Industrial. The practical draughtsman's book of industrial design. *See* **Armengaud** *aîné,* **Armengaud** *jeune,* and **Amouroux.**

——— Inventive. *See* **Whitaker,** William J.

——— lessons. *See* **Reed,** P. Fisbe.

——— magazine, Artist's repository and. *See* **Artist's.**

——— painting and statuary, The arts of. *See* **Camper,** Petrus.

——— Second book of. *See* **Clark,** John.

Dredge, J. Engineering; ed. by. *See* **Engineering.**

DRESDEN. Bildungsanstalt. Programm der technischen Bildungsanstalt und der Baugewerkschule zu Dresden. Schuljahr 1838-57. 4°. *Dresden*, 1838-59.

DRESS and habits of the people of England. *See* **Strutt,** Joseph.

——— Art in. *See* **Blanc,** Charles.

Dresser, Christopher. Carpets. **British manufacturing industries, v. 6.**

Dresser, Chr. Studies in design. *Illus.* fol. *London*, [1876].

DRINKING cups, vases, ewers, and ornaments. *See* **Solis,** Virgil.

Drösse, Hermann. Chemisch-trockene Reinigung. *Illus.* 4°. *Berlin*, 1871.

DRUGS, A complete history of. *See* **Pomet.**

DRUGS. The druggist. *See* **Guide** to trade.

Drugulin, W. Die geheimen Gesellschaften; uebers. v. *See* **Geheimen.**

Du Bois, A. Jay. The elements of graphical statics and their application to framed structures; with numerous practical examples of cranes, bridge, roof and suspension trusses, braced and stone arches, pivot and draw spans, continuous girders, etc.; with the best methods of calculation, and containing also new and practical formulæ for the pivot or draw span, braced arch, continuous girders, etc. Illus. with atlas. 8°. *New York*, 1875.

Dubois, M. Instructions sur le service des officiers d'administration dans les hôpitaux militaires, suivies des instructions sur le service de guerre. 12°. *Metz*, 1835.

Dubrunfaut, M. Le sucre, dans ses rapports avec la science, l'agriculture, l'industrie, le commerce, l'économie publique, etc. 8°. *Paris*, 1873.

Duempelmann, William F. A new, easy and practical method of dyeing woollen yarn in all its different shades and colors. 24°. *Lowell*, 1850. pp. 24.

Duff, Grant. Teachings of Richard Cobden. *See* **Cobden Club, No. 1.**

Dumont, A. B. C. Caña de azúcar; desde su origen, de su cultivo y de la manera de elaborar sus jugos. 8°. *Matanzas*, 1832.

Dunn, Ballard S. Brazil, the home for southerners: or, a practical account of what the author, and others who visited that country for the same objects, saw and did while in that empire. 12°. *New York, New Orleans*, 1866.

Dunning, John. Tobacco. **British manufacturing industries, v. 9.**

DURHAM cows. Vacherie nationale du Pin. *See* **Le Couteulx,** G.

Dürre, E. F. Drehofen von Pernot als Puddelofen für Stabeisen und Stahl, sowie als Gussstahlschmelzofen betrachtet. *Illus.* 8°. *Berlin*, 1875.

Duttenhofer, F. M. Die Geschichte des Pferdes; beard. v. *See* **Martin,** W. C. L.

Duve, A. F. W. Borweinsäure des Borsäureweinsteins und Boraxweinsteins. Inaugural-Dissertation zu Leipzig. 12°. *Leipzig, n. d.*

Digitized by Google

DWELLING houses in town and country, Sanitary condition of. *See* **Waring**, George E., *jr.* **Van Nostrand's science series, No. 31.**

DWELLINGS. Report on private dwellings in Vienna. By J. R. Niernsee. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

DYEING. British manufacturing industries, v. 6.

——— and painting, Combustion; a new art of. *See* **Fulhame**, *Mrs.*

——— and printing. Färberei und Druckerei. *See* **Spirk**, Anton.

——— Compendiöses Handbuch der Färberei. *See* **Schmidt**, Christian Heinrich. **248 Neuer Schauplatz der Künste.**

——— Erfindungen und Fortschritte in der Farbenfabrikation. *See* **Schmidt**, Christian Heinrich. **264 Neuer Schauplatz der Künste.**

——— furs. Rauchwaarenfärberei. *See* **Milz**, B.

——— Practical treatise on. *See* **Practical treatise.**

——— Progrès de l'industrie des matières colorantes artificielles. *See* **Wurtz**, A.

——— La teinture moderne. *See* **Singer**, Max.

——— Les teintures solides que nos végétaux communiquent aux laines et aux lainages. *See* **Dambourney** (*Citoyen*).

——— woollen yarn. *See* **Duempelmann**, W. F.

DYESTUFFS. Chemie und Physiologie der Farbstoffe. *See* **Sachsse**, Robert.

DYSPEPSIA. Diseases of the stomach. *See* **Fox**, Wilson. **Medical news lectures, v. 6.**

EAR. On an artificial membrana tympani. *See* **Toynbee**, Joseph.

Eddy, R. H. Preliminary information respecting application for patents in the United States and foreign countries. Addressed to inventors. 3d ed. 16°. *Boston*, 1847. pp. 32.

EDINBURGH. Royal physical society. Proceedings. v. 3. 1862–66. 8°. *Edinburgh*, 1867.

EDUCATION. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 28.**

——— Arkansas industrial university. First report. *See* ARKANSAS.

——— German universities. *See* **Raumer**, Karl v.

EDUCATION. Mathematische Lehrmittel in Volks- und Mittelschulen. Von Josef Knirr. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 26.**

——— Pedagogía práctica. *See* **Carderera**, Mariano.

Eitner, Wilhelm. Leder-Industrie. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 18.**

ELASTICITY. Lehre von der Elasticitaet. *See* **Winkler**, E.

Elderhorst, William. A manual of blowpipe analysis and determinative mineralogy. 3d. ed. rev. 12°. *Philadelphia*, 1866.

Electric railroad signals; semaphoric distance signals with repeaters; automatic block signals; special signals for tunnels, drawbridges, station yards; carriage and grade switches, etc. Patents of F. Z. Pope and S. C. Hendrickson. 8°. *New York*, 1875.

ELECTRICAL psychology, Course of lectures on. *See* **Mitchell**, Thomas.

ELECTRICITY. *See* **Ferguson**, R. M.

——— and caloric, Identities of. *See* **Cooper**, C. C.

——— La chaleur, la lumière et l'électricité. *See* **Seguin** *aîné.*

——— Darstellung der Elektrizität. *See* **Roget**, P. M.

——— Electrical illumination. *See* **Watson**, J. J. W.

——— Electrical testing. *See* **Kempe**, H. R.

——— Magnetische und elektrische apparate. Von A. v. Wattenhofen. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 14.**

——— Notes of experiments, with thoughts on. *See* **Chalmers**, Charles.

ELECTRO-galvanic machines; manufactured by Horne, Thornthwaite and Wood. *See* **Horne**, etc. A guide to the correct administration of medical galvanism.

——— gilding and silvering, Instructions in. *See* **Sturgeon**, W.

——— metallurgy. Die Kunst des Vergoldens, etc. *See* **Schmidt**, Christian Heinrich. **133 Neuer Schauplatz der Künste.**

——— plating. **British manufacturing industries, v. 3.**

——— telegraphy. Handbuch der elektrischen Telegraphie. *See* **Zetzsche**, K. E.

Digitized by Google

ELECTROTYPING, Operations of. *See* **Mathiot**, G.

——— Galvanoplastic art. *See* **Jacobi**, M. H.

ELEVATORS. Personen- und Lastenaufzüge und Fördermaschinen. A. Riedler. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 20.**

Eliot, Charles W., and **Storer**, Frank H. A manual of inorganic chemistry, arranged to facilitate the experimental demonstration of the facts and principles of the science. 2d ed. rev. 8°. *New York*, 1868.

Ellet, Charles. The Mississippi and Ohio rivers: containing plans for the protection of the delta from inundations; improving the navigation of the Ohio, etc. 8°. *Philadelphia*, 1853.

Elliott, Charles Wyllys. Pottery and porcelain from early times down to the Philadelphia exhibition, 1876. Illustrated with important marks and monograms. roy. 8°. *New York*, 1878.

ELMIRA, Directory, 1857. *See* **Wilson**, H.

EMBANKMENTS and canals. *See* **Smiles**, Samuel. **Lives of the engineers, v. 1.**

——— Tables for contents of excavations and. *See* **Lyons**, M. E.

EMBRASURES, Report on firing from casemate. By J. G. Totten. *See* UNITED STATES. **War dept. Papers on practical engineering, No. 6.**

Emerson, James. Records of waterwheel tests, made at Lowell, Massachusetts, and other places, since 1869. 4°. [*Lowell?*] 1872.

Emerson, William. A system of astronomy; containing the investigation and demonstration of the elements of that science. 8°. *London*, 1769.

Emmons, Ebenezer. North Carolina. Geological survey. *See* NORTH CAROLINA.

Emmons, S. F. Descriptive geology. *See* **Hague**, Arnold, and **Emmons**, S. F. UNITED STATES. **War dept. Papers on practical engineering, No. 18.**

Ems, seine Heilquellen und Umgebungen. 8°. *Wiesbaden, n. d.*

ENCYCLOPÆDIA. Encyclopédie de l'ingénieur, etc. *See* **Delaistre**, J. R.

——— The London. *See* LONDON.

——— of Pennsylvania, The biographical. *See* **Biographical.**

Encyclopædia; or, a dictionary of arts, sciences and miscellaneous literature; constructed on a plan by which the different sciences and arts are digested into the form of distinct treatises or systems, comprehending the history, theory and practice of each, according to the latest discoveries and improvements. 1st Amer. ed. greatly improved. *Illus.* v. 1–18. 4°. *Philadelphia*, 1798.

——— Pantologia, a new cyclopædia. *See* **Good**, John, **Mason**, Gregory O., and **Bosworth**, N.

——— The penny. *See* **Penny.**

——— Universal history of arts and sciences. *See* **Coetlogon**, Dennis de.

Engel, *Dr.* Bericht über die 5te Sitzungsperiode des internationalen statistischen Congresses in Berlin. 2. Bde. 4°. *Berlin*, 1865.

Engel, Ernst. Die Baumwollen-Spinnerei im Königreich Sachsen seit Anfang dieses Jahrhunderts bis auf die neueste Zeit. 4°. *Dresden*, 1856.

——— Zeitschrift des statistischen Bureau des k. sächsischen Ministeriums des Innern. Jahrg. 1–23. 8°. *Leipzig*, 1855–77——.

Engel, Louis. Harmonium tutor; containing the most complete instructions for playing the instrument with effect, rules as to the bellows, keyboard stops, etc. Followed by a series of pieces, sacred and secular, by the best composers; written and arranged by. 1. 4°. *London*, [1868].

Engell and co. Vierundzwanzig mikroskopische Praeparate aus dem Thier- und Pflanzenreiche und deren Beschreibung. 8°. *Bern, n. d.*

ENGINE building. Illustrated catalogue of supplies for engine builders. *See* **Carr**, A.

ENGINEERING. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 26.**

——— American society of civil engineers. Transactions and proceedings. *See* **American.**

Engineering; an illustrated weekly journal; edited by W. H. Maw and J. Dredge. v. 1-24, 1866–77. [v. 1–8 conducted by Zerah Colburn.] 4°. *London*, 1866–77——.

——— (The) and mining journal. v. 8–24, 1869–77. [Continuation of American

Digitized by Google

Engineering—Continued.
journal of mining, *q. v.*] fol. and 4°. *New York*, 1869-77——.
——— Annual report of the chief of engineers. *See* UNITED STATES. **War dept. Bureau of engineers.**
——— civil and mechanical, Progress of. *See* **Smith**, William, **Noble**, John Henry, and **Smith**, Thomas.
——— Civil. Foundations. *See* **Gaudard**, Jules. **Van Nostrand's science series, No. 34.**
——— drawing, Practical geometry and. *See* **Clarke**, George S.
——— Encyclopédie de l'ingénieur, etc. *See* **Delaistre**, J. R.
——— Handbuch der Ingenieur-Wissenschaften. *See* **Heusinger v. Waldegg**, E., **Franzius**, L., and **Sonne**, E.
——— How to become a successful engineer. *See* **Stuart**, Barnard.
——— Des Ingenieurs Taschenbuch. *See* BERLIN. **Verein** 'die Hütte'.
——— Mechanical, and machine making. *See* **Working** drawings and designs.
——— notes. *See* **Robertson**, Frank.
——— papers: mortar; practical ironwork; retaining walls. *See* **Smith**, C. Graham.
——— Skizzen-Buch für den Ingenieur. *See* **Wiebe**, F. K. H.
——— Steam. *See* **Nystrom**, John W.
——— Tables for contents of excavations and embankments. *See* **Lyons**, M. E.
——— terms, Dictionary of English and German. *See* **Dictionary.**
——— Theorie der eisernen Träger mit Doppelflanschen. *See* **Klose**, H. A.
ENGINEERS, mechanical, Institution of. *See* **Institution.**
ENGINES, Blast. Working drawings. *See* **Coulthard**, H. C.
——— Compound. *See* **Mallet**, A. **Van Nostrand's science series, No. 10.**
ENGLAND, Dress and habits of. *See* **Strutt**, Joseph.
——— Old; regal, ecclesiastical, etc. *See* **Knight**, Charles.
ENGLISH language. Elementary English grammar. *See* **Latham**, R. G.
——— ——— English etymology. *See* **Lemon**, George William.
——— ——— Good English. *See* **Gould**, E. S.
——— ——— Institutes of English grammar. *See* **Brown**, Goold.
ENGLISH language. Outlines of English grammar. *See* **Outlines.**
——— ——— Principles of English grammar. *See* **Bullions**, Peter.
——— latin (The) dictionary. Linguae latinae dictionarium classicum. 4°. *n. t. p.*
——— patents. *See* GREAT BRITAIN. **Great seal patent office.**
ENGRAVING. Jewett's new style of relief line. *See* **Jewett**, E. R.
ENGRAVINGS, Collection of, from ancient vases, etc. *See* **Hamilton**, William.
Enthoffer, J. Manual of topography, and textbook of topographical drawing, etc. With an atlas. 8°. *New York*, 1870.
EPIDEMIC cholera and yellow fever in the army of the United States, 1867, Report on. *See* UNITED STATES. **War dept. Surgeon-general's office. Circ. 1.**
EPIDEMICS. Hippocrates upon epidemical diseases, and Thucydides' account of the plague of Athens. *See* **Clifton**, Francis.
Erichsen, John Eric. On railway and other injuries of the nervous system. 8°. *Philadelphia*, 1867. **Medical news lectures, v. 1.**
Essay (An) on shooting; containing the various methods of forging, dressing and boring gun barrels, practised in France, Spain and England, and the different proofs of barrels employed in those countries; with remarks, etc. 2d ed. 8°. *London*, 1791.
ETHNOLOGY. Indian races of North and South America. *See* **Brownell**, C. D.
——— Indigenous races of the earth. *See* **Nott**, J. C., and **Gliddon**, George R.
——— Types of mankind. *See* **Nott**, J. C., and **Gliddon**, George R.
ETYMOLOGY, English. *See* **Lemon**, George W.
Evans, Morgan. Butter and cheese. **British manufacturing industries, v. 12.**
Everitt, L. H. Vital-atomic medicine and surgery by inhalation, voltaism, absorption. 8°. *New Orleans*, 1856.
Evers, Henry. Steam and the steam engine; land, marine and locomotive. 8°. *New York*, 1872. **Putnam's science series, 22 a.**

Digitized by Google

EXCAVATIONS and embankments, Tables for contents of. *See* **Lyons**, M. E.

EXCISIONS of the head of the femur for gunshot injury, Report on. *See* UNITED STATES. **War dept. Surgeon-general's office. Circ. 2.**

EXHIBITIONS, Industrial. London, 1851. Industry of nations as exemplified in the great exhibition of 1851. *See* **Industry.**

—— —— Newark (N. J.), 1872. Report and catalogue. *See* NEWARK.

—— —— of the Maryland institute. *See* MARYLAND.

—— —— Paris, 1867. Official correspondence on the subject. *See* UNITED STATES. **State** department.

—— —— Philadelphia, 1876. Catalogue of centennial commission. *See* UNITED STATES. **Centennial** commission.

—— —— —— Collective exhibits. *See* PHILADELPHIA. **Internat. exhib. 1876. Group *.**

—— —— —— The world's fair. *See* **Walker**, Francis A.

—— —— Record of annual exhibitions. *See* LONDON. **Society** of arts, etc.

Exner, Wilhelm Franz. Die mechanischen Eigenschaften des Holzes; rev. und uebers. von. *See* **Chevandier**, E., and **Wertheim**, G.

EXPERIMENT, Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 25.**

EXPERIMENTAL stations. Die landwirthschaftlich-chemische Versuchsstation Hohenheim. *See* **Wolff**, E.

EXPLORATIONS across the Great Basin of Utah, 1859. *See* **Simpson**, J. H.

—— Expedition up the Yellowstone, 1875. By James W. Forsyth and F. D. Grant. *See* UNITED STATES. **War** department.

—— Exploring expedition from Santa Fé. *See* UNITED STATES. **War dept. Bureau of engineers.**

—— in Nebraska and Dakota, 1855–57. *See* **Warren**, G. K. UNITED STATES. **War dept. Bureau of engineers.**

EXPLOSIONS, Steam boiler. *See* **Colburn**, Zerah. **Van Nostrand's science series, No. 2.**

EXPLOSIVES. British manufacturing industries, v. 2.

—— *See* PHILADELPHIA. **Internat. exhib. 1876. Group 16.**

—— Researches on. *See* **Noble**, —, and **Abel**, F. A.

FABRICS. *See* PHILADELPHIA. **Internat. exhib. Group 8.**

—— Fabriek- en handwerknijverheid. *See* **Reinders**, B.

Fairbank, Noah. Directions for obtaining fresh water from sea water on board of sailing vessels. 8°. *Baltimore*, 1859.

FANCY articles. *See* PHILADELPHIA. **Internat. exhib. Group 10.**

—— trades. Stationer and fancy trades' register. *See* **Stationer.**

FARMING as a profession. *See* **Bland**, T. A.

—— on shares. Étude du contrat de métayage. *See* **Lapouyade**, J. F.

FARRIERY. Every man his own farrier. *See* **Griffis**, O. H. P.

—— Every man his own farrier. *See* **Wildesen**, Samuel.

—— The farrier recipe. *See* **Calhoun**, W. G.

—— The gentleman's stable directory, etc. *See* **Taplin**, William.

—— Patent horse-breaker and economical farrier. *See* **Sterret**, James.

—— The pocket farrier. *See* **Stewart**, Robert.

Fast, Edward G. Catalogue of antiquities and curiosities collected in the territory of Alaska. 12°. [*New York*, 1869.] pp. 32.

FATIGUE of metals under repeated strains. *See* **Spangenberg**, Ludwig. **Van Nostrand's science series, No. 23.**

FAUNA. Molluschi Dalmati. *See* **Brusina**, Spiridione.

Fehling, Hermann. Neues Handwörterbuch der Chemie. B. 1. 8°. *Braunschweig*, 1871–77——.

Felkin, W. Hosiery and lace. **British manufacturing industries, v. 6.**

Ferguson, Robert M. Electricity. 16°. *London and Edinburgh*, 1867.

Fergusson, James. History of the modern styles of architecture. 2d ed. forming the 4th vol. of the new ed. of the History of architecture. 8°. *London*, 1873.

Ferrel, William. Discussion of tides in Boston harbor; prepared by. 4°. *Washington*, 1868. United States coast survey. Report for 1868, appendix.

—— United States coast survey report, 1874. Appendix: Tidal researches. 4°. *Washington*, 1874.

Digitized by Google

Ferrini, Rinaldo. Technologie der Wärme, Feuerungsanlagen, Kamine, Oefen, Heizung und Ventilation der Gebäude, etc., etc. Unter Mitwirkung des Verfassers aus dem italienischen von M. Schröter. Mit einem einleitenden Vorwort von Gustav Zeuner. *Illus.* 8°. *Jena,* 1878.

FESTIVALS of societies. Der polytechnische Verein zu Würzburg in den ersten fünfzig Jahren seines Bestehens. *See* WÜRZBURG. **Polytech. Verein.**

Fetridge, M. Pembroke. Harper's handbook for travellers in the East. 6th year. 12°. *New York,* 1867.

FEVER, Lectures on. *See* **Stokes,** Wilson. **Medical news lectures, v. 7.**

——— Lectures on the study of. *See* **Hudson,** Alfred. **Medical news lectures, v. 2.**

——— of the United States. *See* **Bartlett,** Elisha.

Feyrer, Alois. Der Locomotivbau in den Vereinigten Staaten. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 16.**

FIBRES. British manufacturing industries, v. 9.

Fichet, M. Notice sur les travaux de M. Fichet, serrurier mécanicien. 8°. *Paris,* 1855.

Field and forest; devoted to general natural history. Charles E. Dodge, editor. Bulletin of the Potomac-side naturalists' club. v. 1–2. June, 1875, to June, 1877. [Monthly.] 8°. *Washington,* 1876–77———.

FIELD and forest. Land- und forstwirthschaftliche Akademie. Beschreibung. *See* HOHENHEIM.

FIG-culture in northern and middle States. *See* **Worthington,** J. T.

FINANCE. The commercial and financial chronicle. *See* **Commercial.**

FINE arts. Graphia; or the use of pen and pencil in drawing. *See* **Sanderson,** William.

——— ——— Practice of drawing and painting. *See* **Dagley,** R.

——— ——— The works of Prof. Camper. *See* **Camper,** Petrus.

FIRE-arms. Quellen zur Geschichte der Feuerwaffen. *See* **Quellen.**

FIREBALLS. Über Sternschnuppen und Feuerkugeln. *See* **Wolf,** Rudolf.

FIREPROOF materials. Die feuerfesten Thone, mit Berücksichtigung der feuerfesten Materialien überhaupt. *See* **Bischof,** Carl

FISH. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 5.**

FISHING apparatus. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 5.**

——— in American waters. *See* **Scott,** Genio C.

Fittig, R. Traité de chimie organique, d'après Wöhler. Traduction française publiée sur la 10e éd. allemande; par Ch. de la Harpe et Fr. Reverdin. Avec une préface par M. A. Würtz. 8°. *Paris,* 1878.

Five acres too much. *See* **Roosevelt,** R. B.

Flanders, W. A. Nature's bee-book; a practical treatise, calculated to assist the bee-keeper in overcoming the difficulties and mysteries of bee-keeping and insure profitable returns for labor and capital invested. *Illus.* 32°. *Mansfield, O.,* 1867.

Flattich, Wilhelm. Gesammt-Anordnung der Bahnhöfe und Stationen, insbesondere der Hochbauten. *Illus.* 8°. *Wien,* 1870.

FLAX. British manufacturing industries, v. 5.

Fleischl, —. Medicine. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst 1876. Heft 3.**

——— Mikroskope. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 3.**

Fletcher, James C., and **Kidder,** D. P. Brazil and the Brazilians, portrayed in historical and descriptive sketches. 6th ed. *Illus.* 8°. *Boston,* 1866.

Fleury, A. L. Gold in an amorphous and chemically combined condition in nature. Its nature, properties and relationship. Descriptions of processes for extracting the precious metals from their ores. 8°. *Boston,* 1868.

Flora oder allgemeine botanische Zeitung. Hrsg. von der königl. bayer. botanischen Gesellschaft in Regensburg. Neue Reihe. 13.–21. Jahrg., oder der ganzen Reihe 38.–46. Jahrg. Mit Original-Beiträgen von Arnold, Christ, Czihak, etc. [Jhrg. 41, 43, 45, missing. 38–42, redigirt von A. E. Fürnrohr.] 8°. *Regensburg,* 1855–63.

Florida; its climate, soil, and productions, etc. 8°. *New York,* 1869.

Digitized by Google

FLOUR, Purifiers, and processes for manufacturing. *See* **Allen**, De Witt C.

FLOWERS and the flower garden. *See* **Watts**, Elizabeth.

——— for the parlor and garden. *See* **Rand**, E. S., *jr.*

Floyer, John. Ὑδροληψία; or the history of cold bathing, both ancient and modern. Appendix, by Edward Baynard. 8°. *London*, [1702].

Folger, W. M. French mitrailleuse; its construction and service. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Follen, Charles. A practical grammar of the German language. 21st rev. ed. 12°. *Boston and Cambridge*, 1859.

Fontaine, Hippolyte. Descriptions des machines les plus remarquables et les plus nouvelles à l'exposition de Vienne, 1873. *Illus.* 8°. *Paris*, 1874.

Fonvielle, Wilfried de. Le mètre international, définitif. 18°. *Paris*, 1875.

——— Thunder and lightning. Transl. from the French and edited by T. L. Phipson. *Illus.* 12°. *New York*, [1870]. **Illustrated library of wonders. v. 6.**

FOOD. British manufacturing industries, v. 13.

——— Preservation of. **British manufacturing industries, v. 12.**

Force, Peter. American archives. *See* UNITED STATES. **Congress.**

Fordyce, W. A history of coal, coke, coal fields, progress of coal mining, the winning and working of collieries, household, steam, gas, coking, and other coals; duration of the great northern coal field, mine surveying and government inspection. Iron, its ores, and processes of manufacture, more particularly with reference to the recently discovered iron ores of the Cleveland district. A brief history of the coal and iron trades, with geological map and engravings. fol. *London*, 1860.

FOREIGN words. Allgemeines Fremdenwörterbuch. *See* **Heyse**, J. C. A.

FOREST and water. Moniteur des eaux et forêts. *See* **Thomas**, M.

FORESTRY. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 6.**

Forsyth, James W. Report of an expedition up the Yellowstone. *See* UNITED STATES. **War department.**

FOSSILS. Fossile dyrelevninger fra quartaerperioden. *See* **Sars**, Michel.

Foster, P. Le Neve. Photography. **British manufacturing industries, v. 8.**

FOUNDATIONS. *See* **Gaudard**, Jules. **Van Nostrand's science series, No. 34.**

FOUNDRY, Report on national. *See* UNITED STATES. **Congress.**

——— Unterricht von Hütte Werken. *See* **Schluter**, Christoph.

Fownes, George. Fownes' manual of chemistry, theoretical and practical. v. 1. Physical and inorganic chemistry. 2. Chemistry of carbon compounds or organic chemistry. 12th ed. Rev. by Henry Watts. 12°. *London*, 1877.

Fox, Wilson. The diseases of the stomach; being the third edition of the Diagnosis and treatment of the varieties of dyspepsia; rev. and enl. by. *Illus.* 8°. *Philadelphia*, 1875. **Medical news lectures, v. 6.**

FRANCE. Conseil général des mines. Annales des mines. Mémoires sur l'exploitation des mines, et sur les sciences qui s'y rapportent. Série 2. T. 1–10, 1827–31. Série 3. T. 1–20, 1832–41. Série 4. T. 1–20, 1842–51. Série 5. T. 1–16, Lois et decrets, T. 1–8, 1852–61. Série 7. T. 1–6, 9–11, Lois et decrets, T. 1–3, 5, 6, 1872–77. 8°. *Paris*, 1827–77.

——— Conseil supérieur de l'agriculture, du commerce, etc. Enquêtes. Traité de commerce avec l'Angleterre. Industries textiles; laine, coton, jute, crin, lin, soies, caoutchouc. Industrie métallurgique; fonte, fers, aciers, et ses dérivés. Métaux et ouvrages en métaux. Machines et mécaniques. T. 1–6. 4°. *Paris*, 1861–62.

——— Département de la guerre. Recueil de mémoires et observations sur l'hygiène et la médecine vétérinaires militaires. T. 11. 8°. *Paris*, 1860.

——— Ministère de l'agriculture, du commerce, etc. Chemins de fer français. Réseaux exploités. Croquis indicateurs des distances. 1859. fol. *Paris*, 1859.

Fränkel, —, and **Heyn**, —. Atlas des Bauwesens. *Illus.* 4°. *Leipzig*, 1874.

Franklin, Walter S. American state papers; ed by. *See* UNITED STATES. **Congress.**

Franklin, William B. The Gatling gun, for service ashore and afloat; with a history of the invention, description of the

Digitized by Google

Franklin, William B.—Continued.
gun, official reports of recent trials, general directions, and engravings of the gun, carriages, practice targets, etc. 4°. *Hartford*, 1874.

FREE trade, Papers on. *See* **Cobden Club, No. 2.**

Freeman, Henry S. Complete instructions for the prosecution of a new, beautiful and lucrative art; the inlaying of mother of pearl in tables, work boxes, writing-desks, etc. 12°. 1851. *n. t. p.* pp. 3.

FREIBERG. Bergacademie. Fortschritte der berg- und hüttenmännischen Wissenschaften in den letzten 100 Jahren. 2ter Theil. 8°. *Freiberg*, 1867.

French, John. The art of distillation, or a treatise of the choisest spagyricall preparations performed by way of distillation, being partly taken out of the most select chymicall authors of severall languages, and partly out of the author's manuall experience: together with the description of the chiefest furnaces and vessels used by ancient and modern chymists; also, a discourse of divers spagyricall experiments and curiosities, of the anatomy of gold and silver with the chiefest preparations and curiosities thereof, and vertues of them all. All of which are contained in six books, composed by. *Illus.* sm. 4°. *London*, 1651.

FRENCH language. A collection of colloquial phrases for the blind. *See* **Bolmar,** A.

FRESCO painting. The book of art. *See* **Hunt,** F. Knight.

Fresenius, C. Remigius. Manual of qualitative chemical analysis. Translated into the 'new system', and ed. by Samuel W. Johnson. 8°. *New York*, 1875.

FRESH water obtained from sea water. *See* **Fairbank,** N.

Frühling, R., and **Schulz,** J. Die in der Zucker-Industrie in Betracht kommenden Rohmaterialien, Producte und Hülfssubstanzen. 8°. *Braunschweig*, 1876.

FRUIT culture. American pomological society. *See* **American.**

—— —— Essay on pear-blight. *See* **Brainerd,** Jehu.

—— —— Württembergs Obstbau. *See* **Lucas,** Eduard.

Fruit growers' association of the province of Ontario, (Canada.) Report, 1876. 8°. *Toronto*, 1877.

—— Jardin fruitier du muséum. *See* **Decaisne,** J.

Fry, F. Fry's traveler's guide, and descriptive journal of the great north-western territories. 12°. *Cincinnati*, 1865.

Fuchs, C. W. C. Practical guide to the determination of minerals by the blowpipe. Transl. and ed. by T. W. Danby. 8°. *London*, [1968].

FUEL, Artificial. Fabrikation künstlicher Brennmaterialien. *See* **Wagenheim,** Ernst. **254 Neuer Schauplatz der Künste.**

—— —— Value of, compared with coal. *See* **Wormald,** John. **Van Nostrand's science series, No. 9.**

—— Chemical technology: fuel and its applications. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

—— Probirkunde des Eisens und der Brennmaterialien. *See* **Balling,** C. A. M.

Fulhame, *Mrs.* An essay on combustion with a view to a new art of dyeing and painting; wherein the phlogistic and antiphlogistic hypotheses are proved erroneous. 1st Amer. ed. 18°. *Philadelphia*, 1801.

Funke, Walter. Untergrundsdüngung und Düngepflug. Neue Methode der Tiefcultur. 8°. *Berlin*, 1872.

FURNACES burning wet fuel. *See* **Thurston,** R. H.

—— Drehofen von Pernot. *See* **Dürr** E. F.

—— Die neuen continuirlichen Brennöfen. *See* **Liebold,** B.

FURNITURE. *See* PHILADELPHIA. **ternat. exhib. 1876. Group 7.**

—— Specimens of ancient. *See* **Shaw,** Henry.

Furnrohr, A. E. Flora; redigirt v. *See* **Flora.**

FURS. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 10.**

—— Dyeing. Rauchwaarenfärberei. *See* **Milz,** B.

Gallatin, D. B. Digest of cartridges for small arms. *See* **Bartlett,** W. A., and **Gallatin,** D. B.

Galletly, A. Coal. **British manufacturing industries, v. 2.**

Digitized by Google

GALVANIC batteries, Lecture on. By John P. Merrell. *See* UNITED STATES. **Navy dept. Ordnance papers.**

GALVANISM, electro-magnetism, etc. *See* **Sturgeon**, W.

——— A guide to the correct administration of medical. *See* **Horne**, J. H.

———; its efficacy in chronic diseases. *See* **La Beaume.**

——— Origin and progress of. *See* **Origin.**

——— Remarks on medical. *See* **Remarks.**

GALVANOPLASTY. Handbuch der hydroelektrischen Metallüberziehung. *See* **Kaselowsky**, G.

GAMES. Billiards. *See* **Phelan**, Michael.

Gannett, Henry. Meteorological observations during 1872, in Utah, Idaho and Montana; prepared for publication by. 8°. *Washington*, 1873. *See* UNITED STATES. **Geolog. survey of the territories. F. V. Hayden. Misc. publs., No. 2.**

GARDENING and cottage farming. *See* **Doyle**, Martin.

——— Il giardiniere. Giornale d'orticoltura. *See* MILAN.

——— implements. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 23.**

GAS. British manufacturing industries, v. 4.

——— fitting. Illustrated catalogue of supplies for gas fitters. *See* **Carr**, A.

GASES in coal mines. *See* **Atkinson**, J. J. **Van Nostrand's science series, No. 13.**

GATLING gun, History of. *See* **Franklin**, W. B.

——— ——— Provisional drill of. *See* UNITED STATES. **Navy dept. Ordnance papers.**

Gaudard, Jules. Foundations. Transl. from the French, by L. F. Vernon Harcourt. *Illus.* 18°. *New York*, 1878. **Van Nostrand's science series, No. 34.**

Gauss, Carl Friedrich. Werke. 5ter B. Hrsg. v. der Göttingen Gesellschaft der Wissenschaften. 4°. *Göttingen*, 1877.

Geheimen (Die) Gesellschaften des Mittelalters. Aus dem Englischen von W. Drugulin. *Illus.* 16°. *Stuttgart*, 1847. **Wochenbände, 157-163.**

GENEALOGY, American. *See* **Holgate**, Jerome B.

GENOA. Osservatorio. Osservazioni magnetiche e meteorologiche. 8°. *Genova*, 1870.

GEODESY, Contributions to astronomy and. *See* **Maclear**, Thomas.

GEODETIC instruments. Geodätische Instrumente. Kupka *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 3.**

GEOGRAPHY. Atlas zu Schouw's Pflanzengeographie. *See* **Schouw.**

——— Exploration of the Colorado. *See* **Powell**, J. W.

——— Historia mundi, or Mercator's atlas. *See* **Hondy**, Judocus.

——— The royal atlas of modern. *See* **Johnston**, A. K.

GEOLOGY and industry. Come la geologia posse concorrere più dirittamente ai progressi delle industrie. *See* **Curioni**, Giulio.

——— Bergens Omegn. *See* **Hiorthal**, T., and **Irgens**, M.

——— Das Christiania-Silurbecken, chemisch-geognostisch untersucht. *See* **Kjerulf**, Theodor.

——— A collection of geological facts to elucidate the formation of the Ashby coal fields. *See* **Mammatt**, Edward.

——— Descriptive. *See* **Hague**, A., and **Emmons**, S. F. UNITED STATES. **War dept. Prof. papers on eng., No. 18.**

——— Exploration of the Colorado. *See* **Powell**, J. W.

——— Geological survey of Wisconsin, Iowa and Minnesota. *See* **Owen**, David D.

——— Jaettegryder og gamle strandlinier. *See* **Sexe**, S. A.

——— Medical and physical researches, etc. *See* **Harlan**, R.

——— Le névé de Justedal et ses glaciers. *See* **Seue**, C. de.

——— New Jersey geological survey. Report, 1854. *See* NEW JERSEY.

——— New York geological survey. Report, 1837-41. *See* NEW YORK (state).

——— North Carolina geological survey. *See* NORTH CAROLINA.

——— Pennsylvania geological survey. *See* PENNSYLVANIA.

——— Report of geological reconnaissance of Indiana. *See* INDIANA.

——— Rhode Island survey. *See* RHODE ISLAND.

Digitized by Google

GEOLOGY. Om skuringsmaerker, glacialformationen, etc. *See* **Kjerulf,** Theodor.

GEOMETRICAL chemistry. *See* **Wurtz,** Henry.

GEOMETRY and engineering drawing, Practical. *See* **Clarke,** George.

——— Elements of. *See* **Loomis,** Elias.

——— made easy. *See* **Cowley,** John Lodge.

——— Treatise on practical. *See* **Vogdes,** William.

Gerardi, F. Économie du ménage. 12°. *Bruxelles,* 1851.

Gerdiug, T. Die Eisenindustrie oder die Gewinnung des Eisens aus dessen Erzen. 8°. *Leipzig,* 1874.

Gerhart, E. V. An introduction to the study of philosophy, with an outline treatise on logic. 12°. *Philadelphia,* 1858.

GERMAN language, A practical grammar of the. *See* **Follen,** Charles.

GERMANY. Bechler's map of the German empire. *See* **Bechler,** G. R.

——— Universities of, Contributions to the history and improvement of the. *See* **Raumer,** Karl v.

GIANT'S caldrons. Jaettegryder og gamle strandlinier. *See* **Sexe,** S. A.

GIESSEN. Jahresbericht. Fortschritte der reinen, pharmaceutischen und technischen Chemie, Physik, Mineralogie und Geologie, für 1857. 8°. *Giessen,* 1858.

Gilbert, T., and **Prass,** F. The writing reader comprising in the different handwritings of the present day selections from standard authors, with a specimen of German, French, Spanish and Italian commercial penmanship. 8°. *New York,* [1858].

Gill, C. Haughton. Sugar refining. **British manufacturing industries, v. 12.**

Gill, Joseph Reaus. Gill's mechanical stairbuilder; being a series of problems on stair-building and house carpentry; with explanation of the plates, and biographical sketch of the author, by Richard Plant. 4°. *Hamilton, Canada,* 1874.

Gillespie, William Mitchell. Elements of perpendicular projection, for the use of the civil engineering class in Union college. 8°. *Schenectady,* 1847.

Gillmore, Quincy A. Official report to the United States engineer department, of the siege and reduction of Fort Pulaski, Georgia; February, March and April, of 1862. Illustrations and maps. 8°. *New York,* 1862. UNITED STATES. **War dept. Prof. papers on pract. eng., No. 8.**

Gillmore, Quincy A.—Continued.

——— A practical treatise on coignet-béton and other artificial stone. 8°. *New York,* 1871.

GLACIAL period. Maerker efter en iistid. *See* **Sexe,** S. A.

GLACIERS. Le névé de Justedal et ses glaciers. *See* **Seue,** C. de.

——— Om skuringsmaerker, glacialformationen, etc. *See* **Kjerulf,** Theodor.

GLASGOW, Philosophical society of. *See* **Philosophical.**

GLASS. British manufacturing industries, v. 7.

——— industry. Die Glasindustrie, etc. *See* **Lobmeyr,** L.

——— making. Guide du verrier, etc. *See* **Bontemps,** G.

GLAZING. The glazier. *See* **Guide to** trade.

Gliddon, George R. Types of mankind. *See* **Nott,** J. C., and **Gliddon,** G. R.

Glover, Anna. An account of John Glover of Dorchester, and his descendants. 8°. *Boston,* 1867.

Glover, John, Account of. *See* **Glover,** Anna.

Gmelin, Leopold, and **Kraut,** Karl. Handbuch der anorganischen Chemie. B. 1. 1te Abth. Allgemeine und physikalische Chemie; bearb. von Alex. Naumann. 2te Abth. Nichtmetallische einfache Stoffe; bearb. von H. Ritter und dem Herausgeber. B. 3. Metalle; bearb. von S. M. Jörgensen. 8°. *Heidelberg,* 1872–77——.

Gnauth, A., and **Lesker,** L. Deutsches Maler-Journal. Plafonds, Vestibule, Treppenhäuser, Wanddecorationen, Sgraffitten, Holz- und Marmor-Malerei, Blumen, Alphabete, Schilder, Embleme, etc. B. 1. 4°. *Stuttgart,* 1877.

Goebel, Friedrich, **Kunze,** Gustav, and **Schenk,** E. Pharmaceutische Waarenkunde mit illuminirten Kupfern. B. 1, 2 [bound in 1 v.] 8°. *Eisenach,* 1827–34.

GOLD. Collecting, testing, assaying gold; etc. *See* **Kent,** E. N.

——— Nature, properties, relationship, extraction of. *See* **Fleury,** A. L.

——— regions. Idaho and Montana. *See* **Campbell,** J. L.

Digitized by Google

GOLD working. **British manufacturing industries, v. 11.**

Goldschmiedt, —. Chemische Industrie. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 7.**

Good, John Mason, **Gregory,** Olinthus, and **Bosworth,** Newton. Pantologia: a new encyclopædia, comprehending a complete series of essays, treatises and systems, alphabetically arranged; with a general dictionary of arts, sciences and words: the whole presenting a distinct survey of human genius, learning and industry. *Illus.* v. 1–13. [Plates bound in 2 v.; 1 v., Natural history, missing.] 8°. *London,* 1813.

Gooden, T. M. The elements of mechanism; designed for students of applied mechanics. 2d ed. 16°. *New York,* 1872. **Text books of science, No. 6.**

Goodrich, Samuel G. (*'Peter Parley'*). Common school history of Peter Parley, revised and adapted to the use of the pupils of the blind department of the Virginia institution for the education of the deaf and dumb and the blind. 3 v. v. 1. 4°. *Staunton, Va.,* 1849.

Goppelsröder, Friedrich. Chemie und Prüfung der Kuhmilch. 4°. *Basel,* 1872.

Gosse, Philip Henry. Land and sea. 8°. *London,* 1865.

Gottgetreu, Rudolph. Physische und chemische Beschaffenheit der Baumaterialien. Handbuch für Unterricht und Selbststudium. Bearb. von. 2 Bde. 8°. *Berlin,* 1874–75.

GÖTTINGEN. Gesellschaft der Wissenschaften. *See* **Gauss,** Carl F.

Gouilly, A. Cours d'hydraulique; rev. par. *See* **Phillips,** A.

Gould, A. A. Principles of zoölogy. *See* **Agassiz,** Louis, and **Gould,** A. A.

Gould, Edward S. Good English; or popular errors in language. 12°. *New York,* 1867.

Graham, Walter. Brass founding, tin plate and zinc working. **British manufacturing industries, v. 1.**

GRAINING, painting and paper-hanging. *See* **Kunsman,** William.

GRAMMAR, An elementary English. *See* **Latham,** R. G.

——— Institutes of English. *See* **Brown,** Goold.

GRAMMAR of the English language, Analytical and practical. *See* **Bullions,** Peter.

——— of the German language. *See* **Follen,** Charles.

——— Outlines of English, on the basis of the Anglo-Saxon. *See* **Outlines.**

——— The principles of English. *See* **Bullions,** Peter.

Grandjean, A. General observations and dissertations on the growth and proper care of the human hair. 8°. *New York,* 1848. pp. 28.

Grant, Frederic D. Report of an expedition up the Yellowstone. *See* UNITED STATES. **War department.**

GRAPHIC art. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 27.**

GRASSES. Graminées céréales et fourragères. *See* **Moor,** V. P. G. de.

Grawinkel, C. Telegraphen-Technik. Theil 2. Lehre von den Apparaten. 3. Betrieb einer Telegraphen-Station. 8°. *Berlin,* 1876.

GREAT BRITAIN. Board of trade. Report on relative values of unmalted and malted barley, as food for stock. Experiment undertaken by the order of the board of trade. 4°. *London,* 1866.

——— Children's employment commission. Appendix to first report of commissioners. Mines. Part 1. Reports and evidences from sub-commissioners; presented to both houses of parliament by command of her majesty. sm. fol. *London,* 1842.

——— Committee on lifeboats. Report of the committee appointed to examine the life-boat models submitted to compete for the premium offered by his grace, the duke of Northumberland. With list of the existing life-boat, rocket and mortar stations, and an abstract of the wrecks in 1850 on the shores of the British isles; also, appendix, maps and plans. 4°. *London,* 1851.

——— Great seal patent office. Abstract of replies to the secretary of state's circular dispatch of July 11, 1856; calling for information as to the form of the application to be made by persons desirous of obtaining patent rights with colonies, and the expenses attendant on the grant of such patent rights. roy. 8°. *London,* 1857.

——— ——— Information as to the mode of obtaining protection for inventions in the British colonies. Copy of a letter ad-

Digitized by Google

GREAT BRITAIN—Continued.
dressed by W. J. Curtis to all governors of the several British colonies, etc.; and copies of the answers thereto. roy. 8°. *London*, 1857.

——— Magnetical and meteorological observatory, at Toronto, Canada. Observations made. Printed by order of her majesty's government, under the supervision of Edward Sabine. v. 1, 1840–42. 4°. *London*, 1845.

——— Parliament. Report and minutes of evidence taken before the select committee of the house of lords, appointed to consider of the bill, intituled, An act further to amend the law touching letters patent for inventions; and also, of the bill intituled, An act for the further amendment of the law touching letters patent for inventions. Session, 1851. 4°. [*London*], 1851.

——— ——— Report of the commission appointed to inquire into the workings of the law relating to letters patent for inventions. 4°. *London*, 1865.

Greene, Charles E. Graphical method for the analysis of bridge trusses; extended to continuous girders and draw spans. *Illus.* 8°. *New York*, 1875.

Greenleaf, Benjamin. The national arithmetic, on the inductive system, combining the analytic and synthetic methods; forming a complete course of higher arithmetic. 8°. *Boston, etc.*, 1857.

Gregory, Olinthus. Pantologia. *See* **Good,** J. M., **Gregory,** O., and **Bosworth,** N.

Griessmayer, Victor. Die Chemie des Bieres; hrsg. von. *See* **Reischauer,** Carl.

Griffis, Oliver H. P. Every man his own farrier. 18°. *Kalamazoo*, 1857. pp. 24.

GROCER, The complete. *See* **Complete** grocer.

Grothe, Hermann. Allgemeine deutsche polytechnische Zeitung. 5ter Jahrgang. 4°. *Berlin*, 1877.

——— Geschichte vom Spinnen, Weben, Nähen. 8°. *Berlin*, 1875.

Guide (The) to trade. [Treatises paged separately, bound in 2 v. (v. 1) Contains: the plumber, painter and glazier; the chemist and druggist; the joiner and cabinet-maker; the ploughman; the shoemaker. (2) Contains: the tailor; the shoemaker, part 2; the cooper.] 16°. *London*, 1838–1842.

Guillemin, Amédée. The sun. *Illus.* 12°. *New York*, 1870. **Illus. library of wonders, v. 3.**

Guldberg, C. M. Bidrag til theorien for de ubestemte chemiske forbindelser. 8°. *Christiania*, 1870.

——— and **Mohn,** H. Études sur les mouvements de l'atmosphère. 1re partie. 4°. *Christiania*, 1876.

GUNNERY notes. *See* UNITED STATES. **Navy dept. Ordnance papers.**

GUNPOWDER, Fired. *See* **Noble,** —, and **Abel,** —.

———Granulation of; its theory and practice. By J. D. Martin. *See* UNITED STATES. **Navy dept. Ordnance papers.**

GUNS. British manufacturing industries, v. 3.

GUTTAPERCHA. British manufacturing industries, v. 9.

Guyton-Morveau, L. B. Traité des moyens de désinf cter l'air, de prévenir la contagion et d'en arrêter les progrès. 8°. *Paris, An. 9 de la République* [1800].

GYMNASTICS for youth. *See* **Salzmann,** C. G.

Habich, G. E. and H. Atlas von Construktions-Zeichnungen der Geräthe, Maschinen, etc., für Bierbrauereien. fol. *Leipzig*, 1869.

Haddon, James. Elements of algebra, for the use of schools and self-instruction; with key and companion to the above, by J. R. Young. 2 v. 12°. *London.* **Weale's series, Nos. 86, 87.**

Hagen, G. Form und Stärke gewölbter Bogen und Kuppeln. *Illus.* 8°. *Berlin*, 1874.

Hager, Hermann. Untersuchungen. Prüfung und Werthbestimmung aller Handelswaaren, Natur- und Kunsterzeugnisse, Gifte, Lebensmittel, Geheimmittel, etc. *Illus.* 2. B. 8°. *Leipzig*, 1871.

Hague, Arnold, and **Emmons,** S. F. Descriptive geology; submitted to the chief of engineers. *Illus.* 4°. *Washington*, 1877. *See* UNITED STATES. **Geolog. exploration of 40th parallel. Clarence King. v. 2.**

HAIR, Growth and proper care of the. *See* **Grandjean,** A.

Hall, James. The west: its soil, surface and productions. 12°. *Cincinnati*, 1848.

Hallager, F. Kong Christian den fjerdes Norske lovbog af 1604, udgiven af. *See* NORWAY.

Digitized by Google

Hamilton, Frank Hastings. A practical treatise on fractures and dislocations. *Illus.* 3d ed. 8°. *Philadelphia,* 1866.

Hamilton, William. A collection of engravings from ancient vases of pure Greek workmanship, discovered in sepulchers in the kingdom of the Two Sicilies, during 1789–90. 3 v. fol. *Naples,* 1791.

Hammond, Adam. The rudiments of practical brick-laying in six sections; general principles of brick laying; arch drawing, cutting and setting; different kinds of pointing, paving, tiling, materials, slating and plastering; practical geometry, mensuration, etc. *Illus.* 18°. *London,* 1875. **Weale's series, No. 189**

HANOVER. Architekten- und Ingenieur-Verein. Beiträge zur Förderung der Kunst in den Gewerken. Hrsg. von dem Architekten- und Ingenieur-Verein für das Königreich Hannover, 1858–72. 4°. *Hannover,* 1858–72.

HARBORS, lighthouses, and bridges. *See* **Smiles,** Samuel. **Lives of engineers, v. 2.**

HARDWARE, cutlery, etc., Catalogue of. *See* Landers, Frary, and Clark.

Harkness, Albert. A Latin reader intended as a companion to the author's Latin grammar; with references, suggestions, notes, and vocabulary. 12°. *New York,* 1865.

Harlan, R. Medical and physical researches or original memoirs in medicine, surgery, physiology, geology, zoology, and comparative anatomy. *Illus.* 8°. *Philadelphia,* 1835.

Harmon, E. Phonographic stenography; or short hand without a master; in six easy lessons. 18°. *Cleveland,* 1846.

HARMONIUM tutor. *See* **Engel,** Louis.

Harris, Adolphus Oliver. A treatise on the patent compensating portable barometer. 12°. *London,* 1851. pp. 28.

Harrison, James Bower. Popular medical errors. 16°. *London,* 1851.

Harrison, Robert. A text-book of practical anatomy; with additions by an American physician. 8°. *New York,* 1848.

Hart, *Prof.* Constructionen aus dem Maschinenbau. Text und Berechnungen zu Blatt 1 à 22 des Atlases. Hebemaschinen, Pumpwerke, Pressen. 8°. *Carlsruhe, n. d.*

Hart, *Prof.*—Continued.

Hartig, Ernst. Kraftbedarf der Maschinen in der Flachs- und Wergspinnerei. 1. Heft und Atlas. 8°. *Leipzig,* 1869.

—— and **Weiss,** Theodor. Atlas der mechanischen Technik. [Separat-Ausg. aus der 2ten Aufl. des Bilder-Atlases.] l. 4°. *Leipzig,* 1875.

Hartmann, C. F. A. Fortschritte des metallurgischen Hüttengewerbes in der neuern Zeit. Nebst Entwickelung der neuesten quantitativen Metallproduction. B. 2, 1858; B. 5, 1861; B. 6, 1862. 8°. *Leipzig,* 1859–63——.

Hartmann, Carl. Die neuesten Fortschritte der Roh- und Stabeisen-Fabrikation. Ein Supplement zu: 'Praktisches Handbuch der Roh- und Stabeisen-Fab ikation.' *Illus.* 8°. *Leipzig,* 1857.

—— Praktisches Handbuch der Roh- und Stabeisen-Fabrikation in leichtfasslichem Vortrage. Zugleich als systematischer Text zu: Die Fabrikation des Eisens. Von E. Flachat, A. Barrault und J. Petiet. 2te ergänzte und vermehrte Aufl. *Illus.* 8°. *Leipzig,* 1857.

Hartsen, F. A. Neue chemische Untersuchungen. 8°. *Nordhausen,* 1875.

Hartshorne, Henry. Cholera; facts and conclusions as to its nature, prevention and treatment. 16°. *Philadelphia,* 1866.

Haskell, Benjamin. Essays on the physiology of the nervous system; with an appendix on hydrophobia. 8°. *Gloucester,* 1856.

Haskell, E. F. Housekeeper's encyclopædia of cookery. 12°. [*New York,* 1860?] *w. t. p.*

Hassler, F. A. Elements of analytic trigonometry, plane and spherical. 8°. *New York,* 1826.

HATS. Hüte aus Filz und Seide. Huckel. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 2.**

Hatton, Joseph. Printing and bookbinding. **British manufacturing industries, v. 8.**

Hauer, Max. Grundzüge der Mikrophotographie. *Illus.* 8°. *Leipzig,* 1876.

Hawney, —. Hawney's complete measurer: or, the whole art of measuring; being a plain and comprehensive treatise

Digitized by Google

Hawney—Continued.
on practical geometry and mensuration. Corrected and improved by T. Keith. 12°. *Philadelphia*, 1801.

Hay, D. R. Essay on ornamental design, with an attempt to develope its principles and to point out an easy method of acquiring facility in its practice. 4°. *London*, 1844.

Hayes, Lester. Hayes' railroad fast-express wages computing tables. Computed and arranged by. l. 8°. *Buffalo*, 1865.

HAZE and dust. *See* **Tyndall,** John. Scientific addresses. **University series, No. 5.**

HEALTH and long life, Guide to. *See* **Culverwell,** R. J.

——— The art of preserving. *See* **Davis,** J. B.

——— Influence of anthracite coal upon. *See* **Derby,** George.

——— De l'influence paludeuse sur la santé, etc. *See* **Heuschling,** X.

——— Report of the secretary of the state board of health of Michigan. *See* MICHIGAN. **State** board, etc.

——— The sanitarian. A monthly journal. *See* **Sanitarian.**

HEAT. Causes et effets de la chaleur. *See* **Seguin** *aîné.*

——— Verbreitung der Wärme auf der Oberfläche der Erde. *See* **Dove,** H. W.

HEATING apparatus. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 14.**

——— by gas. Die Gasfeuerung oder Construction von Feuerungs Anlagen. *See* **Ramdohr,** L.

——— Technologie der Wärme. *See* **Ferrini,** Rinaldo.

HEBREWS, Laws of the ancient. *See* **Wines,** E. C.

Hefner-Alteneck, J. H. de. Serrurerie, ou les ouvrages en fer forgé du moyen-age et de la renaissance. Trad. par M. Daniel Ramée. *Illus.* 4°. *Paris*, 1870.

Heister, Laurence. A general system of surgery, in three parts; containing the doctrine and management, 1st. Of wounds, fractures, luxations, tumors, and ulcers of all kinds. 2. Of the several operations performed on all parts of the body. 3. Of the several bandages applied in all operations and disorders, etc. 6th ed., transl. from the author's last ed., greatly improved. *Illus.* 4°. *London*, 1757.

Henneberg, W. Landwirthschaftliche Pflanzen und Thierproduction. 8°. *Göttingen*, 1867–69.

Henry, —. Précis descriptif sur les instrumens de chirurgie anciens et modernes, etc. *Illus.* 8°. *Paris*, 1825.

Henry, William. The elements of experimental chemistry. 11th ed. 2 v. [v. 1 missing.] 8°. *Philadelphia*, 1831.

Henslowe, William Henry. The phonarthron; or natural system of the sounds of speech; a test of pronunciation for all languages; also, the phonarithmon, and the phonodion. To which is added a practical application of the phonarthron to English and French pronunciation; and to the reading of Hebrew, etc. 8°. *London*, 1840.

Herman, Otto. Magyarország Pók-faunája. A kir. magyar természettudományi társulat megbizásából. 1°. Kötet. Három táblával. 4°. *Budapest*, 1876.

Hermann, H. E. Die italienische Alpenbiene. Anleitung sich fruchtbare ächte Italiener Königinnen zu erziehen und deutsche Bienenstöcke in italienische umzuwandeln. 8°. *Chur*, 1859.

Herschell, Clemens. Continuous revolving drawbridges; the principles of their construction and the calculations of the strains on them; with more especial reference to the designing of continuous panel girders of this description. 8°. *Boston*, 1875.

Herzog, Max., and **Pfeufer,** Carl. Schutz wider die Cholera. 8°. *New York*, 1866.

Hesse, A. E. Der unterseeische Tunnel zwischen England und Frankreich, vom geologischen, technischen und finanziellen Standpunkte. 8°. *Leipzig*, 1875.

Hesse, Ernst. Die Werkzeug-Maschinen zur Metall- und Holzbearbeitung. *Illus.* *Leipzig*, 1874.

Heuschling, Xavier. De l'influence paludeuse sur la santé et la durée de la vie, etc. 12°. *Bruxelles*, 1848. pp. 16.

Heusinger von Waldegg, E. Kalender für Eisenbahn-Techniker, 1876. 12°. *Wiesbaden*, 1875–76.

Digitized by Google

Heusinger von Waldegg, Edmond, **Franzius,** L., and **Sonne,** Ed. Handbuch der Ingenieur-Wissenschaften für Eisenbahn-, Strassenbau- und Wasserbau-Ingenieure. B. 1. Erd-Strassen- und Tunnelbau. 3. Wasserbau. 8°. *Leipzig,* 1877.

Heyse, J. C. A. Allgemeines verdeutschendes und erklärendes Fremdwörterbuch mit Bezeichnung der Aussprache und Betonung der Wörter und genauer Angabe ihrer Abstammung und Bildung. Neue Bearb. von. 8°. *Hannover,* 1853.

HIDES. British manufacturing industries, v. 9.

HIGH masonry dams. *See* **McMaster,** John B. **Van Nostrand's science series, No. 22.**

Highland and agricultural society of Scotland. Transactions. v. 1, 1859–61; v. 2, 1861–63; v. 3, 1863–65. 8°. *London,* 1859–65.

Hildenbrand, Wilhelm. Cable making for suspension bridges as exemplified in the construction of the East River bridge. *Illus.* 18°. *New York,* 1877. **Van Nostrand's science series, No. 32.**

Hiorthal, T., and **Irgens,** M. Geologiske undersøgelser i Bergens Omegn. 8°. *Christiania,* 1862.

Hippocrates upon air, water, and situation, epidemics, etc. *See* **Clifton,** Francis.

Hirschwald, J. Löthrohr-Tabellen. Leitfaden zur chemischen Untersuchung auf trockenem Wege. *Illus.* 8°. *Leipzig und Heidelberg,* 1875.

HISTORY, Colonial, of New York, Documents relative to. *See* NEW YORK (state).

——— of advertising from the earliest times. *See* **Sampson,** Henry.

History of ancient and modern silver; published by Burty and co. 24°. *Philadelphia,* 1871.

——— of roads. *See* **Smiles,** Samuel. **Lives of the engineers, v. 3.**

——— of sign boards. *See* **Larwood,** Jacob, and **Hotten,** J. C.

——— The pantological system of. *See* **Hunt,** F. W.

Höfer, Hanns. Petroleum-Industrie Nord-Amerikas. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 8**

Hoffman, Martin. Treatise on bees; their keeping and management; with

Hoffman, Martin—Continued.
directions for hiving, wintering, etc. 32°. *Portage City,* 1853.

Hoffmann, C. E. H. Aufnahme des Quecksilbers und der Fette in den Kreislauf. 8°. *Würzburg,* 1854.

HOG, Typhus fever in the, or hog cholera. *See* **Stukey,** Daniel.

Hogan, Theodore O. C. A treatise on the most improved system of stable management. 8°. *Boston,* 1850. pp. 16.

HOHENHEIM, Experimental station of. Die landwirthschaftlich-chemische Versuchsstation Hohenheim. *See* **Wolff,** E.

——— Land- und forstwirthschaftliche Akademie. Beschreibung. 4°. *Stuttgart,* 1863.

Holden, Luther. A manual of the dissection of the human body; with notes and additions by Erskine Mason. 8°. *New York,* [1868].

Holgate, Jerome B. American genealogy; being a history of some of the early settlers of North America, and their descendants, from their first emigration to the present time. Illustrated by genealogical tables. 4°. *Albany,* 1848.

Holmboe, C. A. Norsk og Keltisk. Om det Norske og de Keltiske sprogs indbyrdes laan. 4°. *Christiania,* 1854. pp. 25.

——— Norske vaegt lodder, fra fjortende aarhundrede. 8°. *Christiania,* 1863.

——— Det Oldnorske verbum, oplyst ved sammenligning med Sanskrit og andre sprog af samme aet. 4°. *Christiania,* 1848. pp. 34.

Holmes, Francis S. Phosphate rocks of South Carolina and the great Carolina marl bed, etc. *Illus.* 8°. *Charleston, S. C.,* 1870.

Homans, J. Smith. Hunt's merchant's magazine; ed. by. *See* **Hunt,** Freeman.

HOMESTEAD architecture. Village and farm cottages. *See* **Cleaveland,** H. W., **Backus,** W., and **Backus,** S. D.

Hondy, Judocus. Historia mundi; or Mercator's atlas; containing his cosmographical description of the fabricke and figure of the world. Lately rectified in divers places, as also beautified and enlarged with new maps and tables, by the studious industry of Judocus Hondy. Englished by W. S. sm. fol. *London,* 1635.

Hooibrenk, Daniel, Système de; la culture de la vigne. *See* **Carrière,** E. A

Digitized by Google

Horne, Thornthwaite, and Wood, A guide to the correct administration of medical galvanism; being a companion to the improved electro-galvanic machines manufactured and sold by. 8°. *London, n. d.* pp. 37.

HORSE. Die Geschichte des Pferdes. *See* **Martin,** W. C. L.

——— shoeing. Unterricht in der Hufbeschlagkunde, etc. *See* **Rueff,** *Dr.*

——— Horses; their varieties, breeding and management. *See* **Richardson,** H. D.

——— taming. Handling, riding and driving wild and vicious horses. *See* **Daily,** M. H.

——— ——— A practical system of. *See* **Colwell,** *Prof.*

——— ——— subduing and educating. *See* **Berry,** William C.

——— ——— and training wild horses. *See* **Bennett,** Gilson M.

——— Treatise on stable management. *See* **Hogan,** T. O. C.

HORSEMANSHIP, The science of. *See* **Sutherland,** J. W.

Horst, Tileman Van der. Theatrum machinarum universale of keurige versameling van waterwerken, schutsluizen, waterkeringen, ophaal- en draaibruggen. fol. *Amsterdam,* 1757.

HORTICULTURAL implements. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 23.**

HORTICULTURE. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 29.**

——— Flowers and the flower garden. *See* **Watts,** Elizabeth.

——— Flowers for the parlor and garden. *See* **Rand,** E. S., *jr.*

——— Report of fruit growers' association of the province of Ontario, 1876. *See* **Fruit growers'.**

——— Société royale d'horticulture. *See* PARIS.

Horton, Caroline W. Architecture for general students. *Illus.* 12°. *New York,* 1874.

Horváth, Géza. Magyarország Bodobács féléinek maganrajza. Monographia Lygaeidarum Hungariae. 4°. *Budapest,* 1875.

HOSIERY. British manufacturing industries, v. 6.

HOSPITALS, barracks and military posts, Report on. *See* UNITED STATES. **War dept. Surgeon-general's office. Circ. 4.**

HOUSE-drainage, Defects in. *See* **Philbrick,** Edward S.

Howland, Henry J. Worcester directory, 1857, '58, '65, '67–69. 6 v. 8° and 18°. *Worcester, Mass.,* 1857–69.

Howson, Henry. Patents and the useful arts. 18°. *Philadelphia,* 1878.

Hoyer, E. Lehrbuch der mechanischen Technologie. *Illus.* 8°. *Wiesbaden,* 1875.

Hückel, —. Hüte aus Filz und Seide. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 2.**

Hudson, Alfred. Lecture on the study of fever. 8°. *Philadelphia,* 1869. **Medical news lectures, v. 2.**

Hudson, E. P., and co. The pen and lever; ed. by. *See* **Pen** and lever.

HUDSON, The. *See* **Lossing,** B. J.

——— City directory, 1857. *See* **Wilson,** H.

Hugo, Leopold. Le Valhalla des sciences pures et appliquées. 8°. *Paris,* 1875.

Hull, *Prof.* Building stones. **British manufacturing industries, v. 2.**

Hunt, F. W. The pantological system of history. A panoramic view of the origin and progress of nations and states, in their history, chronology, government, legislation, jurisprudence, religion, etc. Part 1. Historical atlas of the American states. fol. *New York,* 1855.

Hunt, Freeman. Hunt's merchant's magazine and commercial review; established in 1839. July, 1839, to Dec., 1870, 63 vols. [v. 44, 45, ed. by J. Smith Homans and W. B. Dana; from v. 46, ed. by W. B. Dana. Succeeded by the Commercial and financial chronicle, *q. v.*] 8°. *New York,* 1839–70.

Hunt, T. Knight. The book of art, cartoons, frescoes, sculpture, and decorative art, as applied to the new houses of parliament and to buildings in general; with an historical notice of the exhibitions in Westminster hall, and directions for painting in fresco. Compiled from reports of the royal commission of fine arts, and ed. by. *Illus.* 4°. *London,* 1846.

Hunter, John. A treatise on the venereal disease; with copious additions, by Philip Ricord. Ed. with notes, by Free-

Digitized by Google

Hunter, John—Continued.
man J. Bromstead. 8°. *Philadelphia,* 1853.

Husson, C. Le lait, la crème et le beurre au point de vue de l'alimentation, de l'aliment naturel, de l'aliment artificiel et de l'analyse chimique. 12°. *Paris,* 1878.

——— Du vin; ses propriétés, sa composition, sa préparation, ses maladies et les moyens de les guérir, ses falsifications et les procédés usités pour les reconnaître. 12°. *Paris,* 1877.

Hyatt, Thaddeus. An account of some experiments made with Portland-cement-concrete combined with iron as a building material, with reference to economy of metal in construction, and for security against fire in the making of roofs, floors and walking surfaces. *Illus.* 4°. *London,* 1877. [2 copies.]

Hyde, E. W. Skew arches; advantages and disadvantages of different methods of construction. *Illus.* 18°. *New York,* 1875. **Van Nostrand's science series, No. 15.**

HYDRAULIC apparatus. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 20.**

——— engineering. Landwirthschaftlicher Wasserbau. *See* **Perels,** Emil.

——— machines. *See* **Caus,** Isaak de.

HYDRAULICS and hydraulic motors. *See* **Weisbach,** Phil. Julius. **Mechanics of engineering, v. 2.**

——— applied. Appareils à élever l'eau. *See* **Chauveau des Roches, etc.**

———Cours d'hydraulique. *See* **Phillips,** M.

——— Elements of practical. *See* **Downing,** Samuel.

——— Die Hydraulik und die hydraulischen Motoren. *See* **Meissner,** G.

——— Versameling van Waterwerken, Schutsluizen, Bruggen, etc. *See* **Horst,** Tileman Van der.

HYDROPATHY; or the water cure. *See* **Johnson,** Edward.

HYDROPHOBIA, Physiology of the nervous system; with appendix on. *See* **Haskell,** B.

HYDROSTATICS. Cours d'hydraulique etd'hydrostatique. *See* **Phillips,** M.

HYGIENE, Instruments and apparatus of. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 24.**

HYGIENE of the United States army, Report on. *See* UNITED STATES. **War dept. Surgeon-general's office. Circ. 8.**

HYGROMETERS, Description of. *See* **Boye,** M. H. A treatise on pneumatics.

HYPSOMETRY, Barometric. *See* **Williamson,** R. S. On the use of the barometer. UNITED STATES. **War dept. Prof. papers on eng., No. 15.**

——— ——— Handbuch der barometrischen Höhenmessungen. *See* **Schreiber,** Paul.

ICE manufacture on a commercial scale. *See* **Twining,** A. C.

IDAHO. Meteorological observations in Utah, Idaho, etc. *See* **Gannett,** Henry.

ILLUMINATING. Illuminated ornaments. *See* **Shaw,** Henry.

ILLUMINATION. Die electrische Beleuchtung. *See* **Fontaine,** H.

Illustrated (The) inventor; a journal of practical information in art, science and manufactures. 1 v. fol. [*London?*] 1857–58. *n. t. p.*

ILLUSTRATION, Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 25.**

IMPLEMENTS used in sewing, making clothing, lace, ornamental objects, pins, etc. *See* PHILADELPHIA. **Internat exhib. 1876. Group 22.**

INCRUSTATION and corrosion of boilers. *See* **Rowan,** F. J. **Van Nostrand's science series, No. 27.**

INDIA-rubber. **British manufacturing industries, v. 9.**

——— ——— goods. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 10.**

INDIAN languages, Introduction to the study of. *See* **Powell** J. W.

INDIANA. Geological survey. Report of a geological reconnoissance of Indiana, made in 1859–60. By David Dale Owen and Richard Owen, etc. *Illus.* 8°. *Indianapolis,* 1862.

INDIANS. Die Indianer Nord-Amerikas. *See* **Ulrici,** Emil.

INDUCTION and deduction. *See* **Liebig,** Justus.

Industrial art; a monthly review of technical and scientific education at home and abroad. 4°. *London,* 1878.

INDUSTRIAL life, Phenomena of. *See* **Dawes,** Richard.

Digitized by Google

INDUSTRIES, British manufacturing. *See* **British.**

——— The illustrated inventor. *See* **Illustrated.**

——— The polytechnic review. *See* **Polytechnic.**

——— The scientific artisan. *See* **Scientific.**

——— Deutsche Industrie-Zeitung. *See* **Binder**, Robert.

——— of Paris. Statistique de l'industrie à Paris. *See* PARIS. **Chambre** de commerce.

INFANTRY equipments, Directions for fitting. *See* UNITED STATES. **War** department.

——— officer. L'officier d'infanterie en campagne. *See* **Roguet**, V.

Ingleby, C. Mansfield. The stereoscope considered in relation to the philosophy of binocular vision. 8°. *London*, 1853. pp. 33.

INHALATION; its therapeutics and practice. *See* **Cohen**, J. S.

INJECTORS; their theory and use. *See* **Pouchet**, M. Leon. **Van Nostrand's science series, No. 29.**

Inman, T. Spontaneous combustion, and the best means of extinguishing fire. 8°. *London*, 1855.

INSANITY. Education and the physical health of the brain. *See* **Ray**, I.

INSECTS. Notice sur un insecte. *See* **Bazin**, C.

INSURANCE guide and hand-book. *See* **Walford**, Cornelius.

INTEREST and discount, Tables of. *See* **Aikens**, A.

——— calculator. *See* **Young**, W. B.

INTERMENTS, Intramural, in populous cities. *See* **Rauch**, J. H.

IOWA, Geological survey of. *See* **Owen**, D. D.

IRON. British manufacturing industries, v. 1.

——— American manufacturer and iron world. *See* **American.**

——— and steel institute, Journal of. *See* **Journal.**

——— bridges. Eisen, Holz und Stein im Brückenbau. *See* **Eisen.**

——— bridges. Neues System für Eisen-Brücken grosser Spannweiten. *See* **Ruppert**, Carl.

——— clad ships of the world. *See* **Dislère**, M. P.

IRON. Forbedringer ved Iærntilvirkningen. *See* **Stalsberg**, R. F.

——— industry. Gewinnung des Eisens aus dessen Erzen. *See* **Gerding**, T.

——— its ores, manufactures, etc. *See* **Fordyce**, W. A history of coal.

——— manufacture. Roh- und Stabeisen-Fabrikation. *See* **Hartmann**, Karl.

——— ores. Magyarország vasköv á és vasterményei. *See* **Kerpely**, Anton.

——— Portland-cement-concrete combined with iron as a building material. *See* **Hyatt**, Thaddeus.

——— Prehistoric use of. *See* **Day**, St. John V.

——— Probirkunde des Eisens. *See* **Balling**, C. A. M.

——— ships, Magnetism of. *See* **Rogers**, Fairman. **Van Nostrand's science series, No. 30.**

——— smeltiug. Fortschritte der Eisenhütten-Technik. *See* **Kerpely**, Anton.

——— work. Serrurerie ou les ouvrages en fer forgé du moyen âge et de la renaissance. *See* **Hefner-Alteneck**, J. H. de.

IRRIGATION. Landwirthschaftlicher Wasserbau. *See* **Perels**, Emil.

ITALY. Ministero d'agricoltura, etc. Statistica del regno d'Italia. v. 1. Le opere pie nel 1861. 2-3. Navigazione nei porti del regno, anno 1866-67. 4. Elezioni politiche e amministrative, anni 1865-66. 5. Casse di risparmio, anno 1866. 6. Movimento commerciale nell' 1866. 4°. *Firenze e Milano*, 1868.

Jacob, Arthur. On the designing and construction of storage reservoirs. 18°. *New York*, 1873. **Van Nostrand's science series, No. 6.**

——— Practical designing of retaining walls. *Illus.* 18°. *New York*, 1873. **Van Nostrand's science series, No. 3.**

Jacobi, M. H. The whole original process of the galvano-plastic art. 8°. *London, n. d.*

JAPAN. Geological research of Hakkaido. The gold fields of Yesso; Yesso coals, etc. *See* **Munroe**, H. S.

Jarvis, Edward. Practical physiology, etc. 12°. *Philadelphia*, 1847.

Jenks, William. The explanatory Bible atlas and Scripture gazetteer, geographical, topographical, and historical; containing maps of all the countries and

Digitized by Google

Jenks, William—Continued.
places mentioned in the Old and New Testaments. With illustrative essays, local descriptions, colored missionary map of the world; dictionary of the natural history of the Bible, with engravings; tables of time, weights, measures, coins; tabular views, etc. 4°. *Boston*, 1847.

Jennes, E. F. Verhandeling over den overijsselschen vee-stapel; in verband beschouwd met de hulpmiddelen tot deszelfs verbeteringen in behoud. 8°. *Zwolle*, 1849.

Jerome, Chauncey. History of the American clock business for the past sixty years, and life of Chauncey Jerome, written by himself. Barnum's connection with the Yankee clock business. 16°. *New Haven*, 1860.

JEWELRY. British manufacturing industries, v. 11.

——— *See* PHILADELPHIA. **Internat. exhib. 1876. Group 11.**

Jewett, E. R., and co.'s new style of relief line engraving. *Illus.* sm. 4°. *Buffalo*, 1864.

Johnson, Edward. Hydropathy. The theory, principles and practice of the water cure; etc. Illustrated with many important cases. 16°. *London*, 1843.

Johnson, Edward F. Railroad to the Pacific, northern route; its general character, relative merits, etc. 2d ed. 8°. *New York*, 1854.

Johnston, A. S. Explorations across the Great Basin of Utah, under instructions from. *See* UNITED STATES. **War** dept. Bureau of engineers.

Johnston, Alex. Keith. The national atlas of historical, commercial and political geography, constructed from most recent sources. Accompanied by maps and illustrations of the physical geography of the globe, by H. Berghaus. With an ethnographic map of Europe, by Gustaf Kombst. fol. *Edinburgh*, 1846.

——— The royal atlas of modern geography; exhibiting, in a series of entirely original and authentic maps, the present condition of geographical discovery and research, in the several countries, empires, and states of the world. fol. *Edinburgh and London*, 1877.

Johnston, James F. W. Catechism of agricultural chemistry and geodesy. 16°. *Edinburgh and London*, 1844.

——— The chemistry of common life. 2 v. 12°. *Edinburgh and London*, 1855.

——— Elements of agricultural chemistry and geology; with a complete index and American preface, by Simon Brown. 12°. *New York*, [1853].

——— Notes on North America; agricultural, economical and social. 2 v. 8°. *Boston*, 1851.

JOINERY. The joiner. *See* **Guide** to trade.

Jolly, Listing, Frick, and Gurlt. Wissenschaftliche Instrumente. B. 2. Heft 4. 8°. *Braunschweig*, 1874.

Jones, J. W. Southern cultivator; ed. by. *See* **Southern.**

Journal (The) of the iron and steel institute. No. 1. 8°. *London*, 1877.

Kanitz, —. Kurzwaaren-Industrie. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm, Weltausst. 1876. Heft 2.**

Karmarsch, Carl. Handbuch der mechanischen Technologie; Atlas auf Grundlage und als Ergänzung von. *See* **Kronauer,** J. H.

——— and **Heeren,** —. Technisches Wörterbuch. 3te Aufl. bearb. von Friedrich Kick und Wilhelm Gintl. B. 1. A—Bremerblau. 2. Bremergrün—Eisen *Illus.* 8°. *Prag*, 1876–77———.

Kaselowsky, G. Handbuch der hydroelektrischen Metallueberziehung. 8°. *Stuttgart*, 1876.

Kehoe, Sim. D. The Indian club exercise; with explanatory figures and positions, photographed from life; also general remarks on physical culture. *Illus.* 4°. *New York*, 1867.

Keith, T. Hawney's complete measurer; improved by. *See* **Hawney,**

KELTIC language. Norsk og Keltisk. *See* **Holmboe,** C. A.

Kent, E. N. Instructions for collecting, testing, melting and assaying gold; also, for testing silver, platina and mercury. 8°. *New York*, 1848.

KENTUCKY, Historical sketches of. *See* **Collins,** Lewis.

Kerl, Bruno. Repertorium der technischen Literatur. Neue Folge, Jahrg. 1876. 8°. *Leipzig*, 1877.

Digitized by Google

Kerl, Bruno. Repertorium der technologischen Literatur; hrsg. von. *See* PRUSSIA. **Königl.** Ministerium.

Kerpely, Anton. Fortschritte der Eisenhütten-Technik und der anderen metallurgischen Gewerbe. Jahrg. 1865–74. 8°. *Leipzig,* 1866–77——.

——— Magyarország vasközei és vasterményei; különös tekintettel a vas legfőbb chemiai és physikai tulajdonságaira. A kir-magyar term. tudományi társulat megbizásából. 4°. *Budapest,* 1877.

——— Ueber Eisenbahnschienen. (Versuche und Studien.) *Illus.* 47. *Leipzig,* 1878.

KEWANEE. Public library. Catalogue, 1875. Organized April 7th, 1875. 8°. *Kewanee, Ill.,* 1875. pp. 24.

Kiepert, —, **Gräf,** —, and **Bruhns,** —. Hand-Atlas der Erde und des Himmels; in 70 Karten. fol. *Weimar, n. d.*

King, A. F. A. An essay on the ligation and management of the umbilical cord at childbirth. 8°. *Washington,* 1867. pp. 37.

King, Thomas. The modern style of cabinet work exemplified. 2d ed. 4°. *London,* 1862.

King, W. R. Report on certain experimental and theoretical investigations relative to the quality, form and combination of materials for defensive armor, together with incidental facts relative to their use for industrial purposes. Made by direction of A. A. Humphreys. 4°. *Washington,* 1870. UNITED STATES. **War dept. Prof. papers on pract. eng., No. 17.**

Kirtland, J. P. Essay on pear-blight; introductory note by. *See* **Brainerd,** Jehu.

Kitchiner, William. Directions for prolonging life; or the invalid's oracle, etc. From 6th London ed.; rev. by T. S. Barrett. 18°. *New York,* 1831.

Klose, H. A. Höhere Ingenieur-Wissenschaften. Theorie der eisernen Träger mit Doppel-Flanschen. 8°. *Hannover,* 1862.

Knapen, D. M. The mechanic's assistant: a thorough practical treatise on mensuration and the sliding rule: teaching the manner of drawing all regular superficies, and the most concise methods of finding the areas of all regular superficies, and the contents of all regular solids, both by numbers and by the sliding rule. Treating also of the laws of motion. 12°. *New York, Philadelphia,* 1849.

Knapp, F. Revision of technology. *See* **Ronalds,** Edmund, and **Richardson,** Thomas.

Knight, Charles. Old England; a pictorial museum of royal, ecclesiastical, municipal, baronial, and popular antiquities; ed. by. *Illus.* 2 v. 4°. *London, n. d.*

Knight's scroll ornaments, designed for the use of silversmiths, chasers, die-sinkers, modellers, etc. 50 pl. 4°. *London, n. d.*

Köhler, Friedrich. Vollständiges englisch-deutsches und deutsch-englisches Handwörterbuch. 8°. *Leipzig,* 1877.

Kohler, Josef. Deutsches Patentrecht systematisch bearbeitet unter vergleichender Berücksichtigung des französischen Patentrechts. 1. Abth. Einleitung und materielles Patentrecht. 8°. *Mannheim und Strassburg,* 1878.

Königs, G. Patent-System der Vereinigten Staaten von Nord-Amerika. 8°. *Berlin,* 1876.

Könyves-Tóth, Michael. Ueber Tunnelbau im Allgemeinen und über die Ursachen der Deformationen bei Tunnelmauerungen und Vorführung eines neuen Tunnelbausystems. 8°. *Wien,* 1875.

Koops, Matthias. Historical account of the substances which have been used to describe events, and to convey ideas from the earliest date to the invention of paper. 2d ed., printed on paper remade from old printed and written paper. 8°. *London,* 1801. [Also, another ed. printed on stained paper, 1800.]

Krause, —, and **Karmarsch,** —. Deutsche Naturforscher und Ärzte. Bericht über die 40ste Versammlung zu Hannover in 1865. *Illus.* 4°. *Hannover,* 1866.

Kraut, Karl. *See* **Gmelin,** L., and **Kraut,** K. Handbuch der anorganischen Chemie.

Kretzschmar, E. Naturautokratie im Menschen und die allopathischen Arzneidosen. 8°. *Leipzig,* 1837.

Krocker, Anton. Landwirthschaftliches Centralblatt; fortg. von. *See* **Landwirthschaftliches.**

Digitized by Google

Krüger, Julius. Universal-Lehrbuch der praktischen Photographie. 8°. *Leipzig,* 1864.

Kunsman, William. Recipe book on graining, painting and paper-hanging; with an appendix on varnishes, frosting and gilding. 32°. *Easton, Pa.,* 1855. pp. 24.

Kupelweiser, Franz. Das Hüttenwesen und Eisenhüttenwesen Nord-Amerikas. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 4.**

Kupka, —. Geodätische Instrumente. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 3.**

La Beaume, M. On galvanism, with observations on its chymical properties and medical efficacy in chronic diseases; also remarks on some auxiliary remedies. *Illus.* 12° *London,* 1826.

La Bertoche, Pinondel. L'asphodèle, ses applications industrielles. Alcohol, papier, carton. 8°. *Paris,* 1855.

LABORATORY. Das chemische Laboratorium der Universität Christiania. *See* CHRISTIANIA. **Norske** Universitet.

LACE. British manufacturing industries, v. 6.

——— Machines, apparatus and implements used in. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 22.**

Lain, George T. The Brooklyn city and business directory, for the year ending May 1st, 1876. Compiled by. 8°. *Brooklyn,* 1875.

Laing, David. Plans, elevations and sections of buildings in various parts of England, including the new custom-house, London. fol. *London,* 1818.

LAKE SUPERIOR country and copper mines. *See* **St. John,** J. R.

LAND and sea. *See* **Gosse,** P. H.

Landers, Frary and Clark, Illustrated catalogue and price list of table cutlery and hardware; manufactured by, New Britain, Conn. 4°. *Hartford,* 1869.

Landwirthschaftliches Centralblatt für Deutschland. Repertorium der wissenschaftlichen Forschungen und praktischen Erfahrungen im Gebiete der Landwirthschaft. Jahrg. 4-16, 1856-1868. [From July 11, 1863, 'gegründet von A. Wilda, fortgesetzt von Anton Knocker.' 2 v. a year.] 8°. *Berlin,* 1856-68.

LANGUAGE, Philosophical. *See* **Wilkins,** John.

LANGUAGES, Student's manual of. *See* **Lewis,** John.

Langworthy, Franklin. Scenery of the plains, mountains and mines; or a diary kept upon the overland route to California, by way of the Great Salt Lake. 8°. *Ogdensburgh,* 1855.

Lanoye, Ferdinand de. The sublime in nature; compiled from the descriptions of travellers and celebrated writers. *Illus.* 12°. *New York,* 1870. **Illus. library of wonders, v. 12.**

Lapouyade, J. F. Étude du contrat du métayage. Recherches des dispositions législatives à provoquer, à l'effet d'en faire disparaître les vices et les abus, sans porter atteinte à la liberté du travail et aux droits de la propriété. 8°. *Bordeaux,* 1850.

Larwood, Jacob, and **Hotten,** John Camden. The history of signboards, from the earliest times to the present day. *Illus.* 8°. *London,* 1866.

Lasault, A. Elemente der Petrographie. 8°. *Bonn,* 1875.

Latham, R. G. An elementary English grammar, for the use of schools. Rev. ed. 12°. *Cambridge,* 1852.

LATIN language. English-latin dictionary, and Linguae latinae dictionarium. *See* **English-Latin.**

——— ——— Harkness' Latin reader. *See* **Harkness,** Albert.

LAW, international, Opinions of attorneys-general and decisions of courts, with reference to. *See* UNITED STATES. **Dept. of justice.**

Lawes, J. B. The chemistry of the feeding of animals, for the production of meat and manure. 8°. *Dublin,* 1864.

——— and **Gilbert,** J. H. Experiments on the growth of wheat, for twenty years in succession, on the same land. 8°. *London,* 1864.

——— ——— Experiments with different manures on permanent meadow land. 8°. *London,* 1863.

LAWS. Everybody's lawyer. *See* **Crosby,** Frank.

——— of the ancient Hebrews, Commentaries on the. *See* **Wines,** E. C.

——— of the District of Columbia. *See* **Thompson, M.**

Digitized by Google

LAWS of Maryland. *See* **Bacon**, Thomas.

——— of Massachusetts in relation to manufacturing corporations. *See* **Batchelder**, Samuel.

Lawson, Thomas. Army meteorological register; prepared under the direction of. *See* UNITED STATES. **War** department.

Lawson, William John. The history of banking, with a comprehensive account of the origin, rise and progress of the banks of England, Ireland and Scotland. 7th Am. ed., rev. by J. Smith Homans. 8°. *Boston*, 1852.

LEAD pipe. Reports and opinions of chemists in regard to the use of. *See* **Collection** of reports.

Leak, John. New and rare inventions of water-works; trans. by. *See* **Caus**, Isaak de.

LEATHER. British manufacturing industries, v. 9.

——— *See* PHILADELPHIA. **Internat. exhib. 1876. Group 12.**

——— Leder-Industrie. Wilhelm Eitner. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 18.**

Leavitt, William. A new method of finding the longitude at sunrise, sunset and noon. 12°. *Salem*, 1852.

Le Couteulx, Gustav. Vacherie nationale du Pin. Animaux de la race de Durham, dessinés d'après nature. 4°. *Paris, n. d.*

Lee, Daniel. Southern cultivator; ed. by. *See* **Southern.**

Lee, Thomas J. Tables and formulæ useful in surveying, geodesy and practical astronomy, including elements for the projection of maps, and instructions for field magnetic observations. [Comp. by.] 3d ed. 8°. *Washington*, 1873. UNITED STATES. **War dept. Prof. papers on pract. eng., No., 12.**

Lee, William. Report on the disposition of night-soil. 8°. *Washington*, 1870.

Lefèbre, M. Wonders of architecture; trans. from the French of. To which is added, a chapter on English architecture, by R. Donald. 12°. *New York*, 1870. **Illus. library of wonders, v. 15.**

LEIPZIG. Gesellschaft von Gelehrten. Neuer Schauplatz der Natur, in alphabetischer Ordnung. B. 1. 8°. *Leipzig*, 1775.

LEIPZIG. Realschule. Berichte, Schuljahre 1868–76. 4°. *Leipzig*, 1869–77.

Lejeune, Émile. Guide du briquetier, chaufournier, et plâtrier. 8°. *Paris*, 1870.

Léluy, C. Manuel pratique du cuiseur, ou l'art de cuire le sucre en grains et en sirop. 12°. *Paris*, 1873.

Lemon, George William. English etymology; or, a derivative dictionary of the English language: in two alphabets, tracing the etymology of those English words, that are derived, 1. From the Greek and Latin languages; 2. From the Saxon and other northern tongues. The whole compiled from Vossius, Meric Casaubon, Spelman, Somner, Minshew, Junius, Skinner, Verstegan, Ray, Nugent, Upton, Cleland, and other etymologists. 4°. *London*, 1783.

Leon, John A. The art of manufacturing and refining sugar; including the manufacture and revivification of animal charcoal. With an atlas illustrative of the machinery and buildings. fol. *London*, 1850.

Lerebours, N. P. Description des microscopes achromatiques simplifiés. 8°. *Paris, n. d.*

LERNAEA. Beobachtungen über Lernaeocera, Peniculus und Lernaea. *See* **Claus**, C.

Lewis, John. Tables of comparative etymology, and analogous formations, in the Greek, Latin, Spanish, Italian, French, English, and German languages; or, the student's manual of languages. 4°. *Philadelphia*, 1828.

Lhomme, Léon. Travail de la laine cardée. 8°. *Paris*, 1873.

LIBRARIES, Birmingham free. *See* BIRMINGHAM.

——— Catalogue of Burlington (N. J.) library. *See* BURLINGTON.

Library (The) journal. Official organ of the library associations of America and of the United Kingdom. Melvil Dewey, editor. v. 1–2, Sept., 1876–78. 4°. *New York*, 1876–77——.

Liebig, Justus. Induction and deduction. 12°. *München*, 1865.

——— Researches on the motion of the juices of the animal body, and the effect of evaporation in plants; together with an account of the origin of the potato disease, with full and ingenious direc-

Digitized by Google

Liebig, Justus—Continued.
tions for the protection and entire preservation of the potato plants against all diseases. Ed. by William Gregory. 8°. *Philadelphia*, [1850].

——— and **Volt**, —. Atlas zum chemischen Laboratorium der Königl. Academie der Wissenschaften in München. fol. *Braunschweig*, 1859.

Liebold, B. Continuirliche Brennöfen für Ziegel- und Kalksteine, Thonwaaren, Chamotte- und Cementsteine. *Illus.* 8°. *Halle*, 1876.

LIFE-boat institution, Report of royal national. *See* LONDON.

——— boats, Report of the committee on. *See* GREAT BRITAIN. Committee, etc.

——— ships. Steam life-ships and how to build them. *See* **Busk**, Hans.

LIGHT and colors, Experiments on. *See* **Brewster**, David. A treatise on new philosophical instruments.

——— La chaleur, la lumière et l'électricité. *See* **Seguin**, *aîné*.

——— Der Photometer. *See* **Pietschmann**, W.

LIGHTHOUSES. Éclairage et balisage des côtes de France. *See* **Raynaud**, Léonce.

——— harbors and bridges. *See* **Smiles**, Samuel. **Lives of the engineers, v. 2.**

LIGHTING. British manufacturing industries, v. 4.

——— apparatus. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 14.**

Liljeborg, Wilhelm. Ornitologiska Bidrag. 8°. *Upsala*, 1860.

LIME and cement making. Kalk-, Cement-, Gyps- und Ziegelfabrikation. *See* **Rühne**, J. F.

——— burning, Essays on mortars and. *See* **Treussart**, —, **Petot**, —, and **Courtois**, —.

Lindsey, G. Pens and papier mâché. **British manufacturing industries, v. 3.**

Lindsley, D. P. The compendium of tachygraphy; or, Lindsley's phonetic shorthand, explaining and illustrating the common style of the art. 2d ed. 8°. *Boston*, 1865. Also 4th ed., 1867.

LINEN. British manufacturing industries, v. 5.

——— fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 8.**

——— industry. Culture et préparation du lin et des chanvres. *See* **Mâreau**, T.

LINEN industry. Enquête sur l'industrie linière. *See* BRUSSELS. **Ministère** de l'industrie.

Linton, W. J. Illustrations to Scott's 'Fine and ornamental arts'; engraved by. *See* **Scott**, W. B.

Liron D'Airoles, Jules de. Notice pomologique. Variétés du poirier anciennes, modernes et nouvelles. 8°. *Paris*, 1859.

Literary (The) gazette; ed. by C. B. Norton. v. 1–5, 1851–55. 4°. *New York*, 1851–55.

LITERATURE, Athenæum journal of. *See* **Athenæum.**

——— The reader. *See* **Reader.**

LIVE stock. *See* PHILADELPHIA. **Internat. exhib. 1876. Groups 30–35.**

Lloyd, Humphrey. A treatise on magnetism, general and terrestrial. *Illus.* 8°. *London*, 1874.

Lloyd, James T. Steamboat directory, and disasters on the western waters. 8°. *Cincinnati*, 1856.

Lobmeyer, L. Die Glasindustrie, ihre Geschichte, Entwickelung und Statistik. 8°. *Stuttgart*, 1874.

LOCKS. British manufacturing industries, v. 3.

——— in the middle ages. Serrurerie du moyen âge et de la renaissance. *See* **Hefner-Alteneck**, J. H. de.

——— Yale lock manufacturing co. Catalogue and price list. *See* **Yale** lock manuf'g co.

Lockwood Brothers. Colonists' guide to the selection of cutlery. Manufactory, Sheffield. l. 4°. *Sheffield, n. d.*

LOCOMOTIVE, The. *See* **Smiles**, Samuel. **Lives of the engineers, v. 5.**

LOCOMOTIVES. Der Locomotiv-Bau in den Vereinigten Staaten; Alois Feyrer. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 16.**

——— Locomotive der Gegenwart. *See* **Petzholdt**, Alphons.

——— Locomotiven. Sammlung ausgeführter Zeichnungen. *See* **Schaltenbrand**, Carl.

LOGIC. Easy lessons in reasoning. *See* **Whately**, Richard.

——— Elementary. *See* **Atwater**, L. H.

——— An elementary treatise on. *See* **Wilson**, W. D.

——— Elements of. *See* **Boyd**, J. R.

Digitized by Google

LOGIC, Elements of. *See* **Coppée**, Henry.
——— Elements of. *See* **Tappan**, Henry P.
——— The laws of discursive thought. *See* **McCosh**, James.
——— Outline treatise on. *See* **Gerhard**, E. V. Introduction to the study of philosophy.
——— The principles of. *See* **Schuyler**, A.

Londet, —, and **Bouchard-Huzard**, —. Annales de l'agriculture française. 8°. *Paris*, 1869–73.

London (The) encyclopædia, or universal dictionary of science, art, literature, and practical mechanics, comprising a popular view of the present state of knowledge; a general atlas, and appropriate diagrams. By the original editor of the Encyclopædia metropolitana, assisted by eminent professional and other gentlemen. *Illus.* v. 1–22. 4°. *London*, 1829.
——— Royal astronomical society. Memoirs. v. 20. Contributions to astronomy and geodesy. *See* **Maclear**, Thomas.
——— Royal national life-boat institution. Annual report for 1867–77; with lists of the committee, officers, and contributors. 8°. *London*, [1867–77 ———]. *n. t. p.* [1869 wanting?]
——— Royal society. Philosophical transactions. Part 1, 1875. Researches on explosives. Fired gunpowder. By Capt. Noble and F. A. Abel. 4°. *London*, 1875.
——— Society for the diffusion of useful knowledge. Maps of the society. v. 1. fol. *London*, 1846.
——— ——— The penny cyclopædia. v. 1–27. 2 v. supplement. imp. 8°. *London*, 1833–51.
——— Society of telegraph engineers. The telephone. A lecture entitled Researches in electric telegraphy, by Alexander Graham Bell; delivered before the Society of telegraph engineers, Oct. 31, 1877. Ed. by Frank Bolton and William Edward Langdon. 8°. *London, New York*, 1878. pp. 32. *n. t. p.*

LONGITUDE of Valentia, Ireland, Determination of. *See* **Airy**, G. B.

Loomis, Elias. Elements of geometry and conic sections. 3d ed. 8°. *New York*, 1850.
——— Elements of plane and spherical trigonometry, with their applications to mensuration, surveying and navigation. 14th ed. 8°. *New York*, 1858.

LOPHOGASTER Typicus, Beskrivelse over. *See* **Sars**, Michael.

Lorenz, Alfred. Entwässerungs- und Bauarbeiten bei Eisenbahnbauten im Rutschterrain. *Illus.* 8°. *Zürich*, 1876.

Lossing, Benson J. The Hudson, from the wilderness to the sea. *Illus.* 8°. *New York*, 1866.

Lottner, Heinrich, and **Sérlo**, Albert. Leitfaden zur Bergbaukunde. 2 Bde. Ergänzungsband zum Leitfaden. 8°. *Berlin*, 1869, 1872.

Louandre, Charles, and **Monteil**, Alexis. Histoire de l'industrie française, et des gens et métiers. T. 1–2. 8°. *Paris*, 1872.

Lowrie, Walter. American state papers; ed. by. *See* UNITED STATES. **Congress.**

Lucas, Eduard. Württembergs Obstbau. Kurze Darstellung des Zustandes unserer Obstkultur in den verschiedenen Bezirken des Landes. Festschrift des pomologischen Instituts in Reutlingen. 8°. *Ravensburg*, 1871.

Ludlow, William. Reconnaissance of the Black Hills of Dakota. *See* UNITED STATES. **War** dept. Bureau of engineers.
——— Report of a reconnaissance from Carroll to Yellowstone national park. *See* UNITED STATES. **War** dept. Bureau of engineers.

LUMBER, Measuring. Austin's measurement tables. *See* **Austin's.**
——— Worked. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 6.**

LYGAEIDAE. Magyarország Bodobácsféléinek magánrajza. *See* **Horváth**, Géza.

Lyons, M. E. Tables for finding the cubical contents of excavations and embankments, for railroads, turnpike roads, and canals, calculated for bases from one to fifty feet, and for every variety of ground and side slopes. l. fol. *Reading, Pa.*, 1855.

MACHINE building. Constructionen aus dem Maschinen-Bau. *See* **Hart**, Prof.
——— ——— Skizzen-Buch für den Ingenieur und Maschinenbauer. *See* **Wiebe**, F. K. H.

MACHINERY for cotton, linen and other fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 8.**
——— for minerals, mining and metallurgy. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 1.**

Digitized by Google

MACHINERY for the preparation of animal and vegetable products. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 4.**

——— for wool and silk fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 9.**

——— of the nineteenth century. *See* **Dempsey**, G. D.

MACHINES at London exhibition. Alcune macchine all'esposizione di Londra. *See* **Cristoforis**, Luici.

——— Kraftbedarf der Maschinen in der Flachs- und Wergspinnerei. *See* **Hartig**, Ernst.

——— Les machines à l'exposition de Vienne, 1873. *See* **Fontaine**, H.

——— Portefeuille de John Cockerill, ou description des machines, etc. *See* **Cockerill**, John.

——— used in sewing, making clothing, lace, ornamental objects, pins, etc. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 22.**

Maclear, Thomas. Contributions to astronomy and geodesy, forming part of v. 20 of the Memoirs of the Royal astronomical society. Printed at the expense of the board of admiralty. 4°. *London*, 1851.

McMaster, John B. Bridge and tunnel centres. *Illus.* 8°. *New York*, 1875. **Van Nostrand's science series, No. 20.**

——— High masonry dams. 18°. *New York*, 1876. **Van Nostrand's science series, No. 22.**

Macomb, J. N. Report of the exploring expedition from Santa Fé, New Mexico, to the junction of the Grand and Green rivers of the Great Colorado of the West, 1859, under command of. Geological report by J. S. Newberry. 4°. *Washington*, 1876.

McCosh, James. The laws of discursive thought; being a textbook of formal logic. 12°. *New York*, 1870.

McCulloh, R. S. Report to the secretary of the treasury, of operations at the mint of the United States, in refining California gold by zinc method. 8°. *Washington*, 1852.

McCully, Henry. The honey-bee; containing many new discoveries made concerning the management of bees, etc. To which is added, the causes that produce cholera, diarrhea, etc. Also, instructions for regulating the rifle gun. 8°. *New York*, [1856]. pp. 16.

MAGNETISM, General and terrestrial. *See* **Lloyd**, Humphrey.

——— Observations at Toronto observatory. *See* GREAT BRITAIN. Magnetical and meteorological observatory.

——— Terrestrial, and the magnetism of iron ships. *See* **Rogers**, Fairman. **Van Nostrand's science series, No. 30.**

——— Verdeeling van het Magnetismus. *See* **Rees**, R.

Magrini, Luigi. L'ecclisse solare totale dell'8 luglio, 1842. 8°. *Milano*, 1843.

——— Intorno i guasti cagionati dal fulmine al telegrafo electrico, e intorno al modo di premunirsi contro questa azione della elettricità. 8°. *Milano*, 1834.

——— Osservazioni astronomiche e fisiche sull'ecclisse solare del 28 luglio, 1851. 8°. *Milano*, 1852.

——— Osservazioni e nuove sperienze sopra un fenomeno avvertito dal signor Dubois-Reymond. 8°. *Milano*, 1850.

——— Ricerche sulla natura del principio elettrica. 8°. *Milano*, 1852.

——— Sopra un modo particolare di polarizzazione dei coibenti svelato dai fenomeni dell'elettricità vindice. 8°. *Milano*, 1854.

——— Sugli effetti dell'arco voltiano nell'olio di trementina. 8°. *Milano*, 1855.

——— Sulla elettro mozione tellurica. 8°. *Milano*, 1845.

——— Sulla particolarità del legno di trasmettere una corrente elettrica più facilmente nel senso delle fibre che trasversalmente. 8°. *Milano*, 1854.

——— Sulla tromba che devastò l'i. r. parco di Monza. 8°. *Milano*, 1846.

——— Sulle trombe di terra e di mare. 8°. *Milano*, 1847.

——— Telegrafo elettro-magnetico. 8°. *Milano*, 1838.

Malgaigne, J. F. Œuvres d'Ambroise Paré. Introduction and life. *See* **Paré**, Ambroise.

Mallet, A. Compound engines. Transl. from the French. *Illus.* 18°. *New York*, 1874. **Van Nostrand's science series, No. 10.**

Mammatt, Edward. A collection of geological facts and practical observations, intended to elucidate the formation of the Ashby coal-field, in the parish of Ashby-

Digitized by Google

Mammatt, Edward—Continued.
de-la-Zouch and the neighboring district; being the result of forty years' experience and research. Illustrated by map and profiles. 4°. *Ashby-de-la-Zouch*, 1834.

Manley, J. J. Salt Preservation of food, etc. **British manufacturing industries, v. 12.**

Mann, W. W. Linn-base decimal system of measures, weights and money. 12°. *New York*, 1871.

Manulicher, F. Pumpen- und Feuerlöschapparate. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 21.**

MANUFACTURE of glass. Glasfabrikation. *See* **Benrath,** H. E.

MANUFACTURES. American manufacturer and iron world. *See* **American.**

——— British manufacturing industries. *See* **British.**

——— of leather. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 12.**

——— Principles of science applied to. *See* **Potter,** Alonzo.

MANUFACTURING corporations, Laws of Massachusetts in relation to practical. *See* **Batchelder,** Samuel.

MANURES, Experiments with different. *See* **Lawes,** J. B., and **Gilbert,** J. H.

MAPS of the Society for the diffusion of useful knowledge. *See* LONDON. **Society of, etc.**

Marahrens, A. Real-Lexikon der Buchdruckerkunst und der ihr verwandten graphischen Künste und Gewerbe. B. 1. 8°. *Fulda*, 1877.

MARBLE. Schleifen, Poliren, Färben, und Verzieren des Marmors. *See* **Weber,** Martin. **268 Neuer Schauplatz der Künste.**

MARBURG. Gesellschaft zur Beförderung der gesammten Naturwissenschaften. Sitzungsberichte, B. 1-2. 8°. *Marburg*, 1866-75.

Mâreau, T. Industrie linière. Culture et préparation du lin et des chanvres. 4°. *Paris*, 1859.

Mareira, Nicolau Joaquim. Agricultural instructions for those who may emigrate to Brazil. 8°. *Rio de Janeiro*. 1875.

Margolle, —. Meteors, aërolites, storms, etc. *See* **Zurcher and Margolle. Illustrated library of wonders, v. 19.**

Mariner's (The) atmospherical register, or weather book: comprehended in thirteen sheets; construc ed for recording the variations of the marine barometer and thermometer; the latitude, longitude, direction of the wind, state of the weather. l. 4°. *Philadelphia*, 1825.

Marsh, George P. Johnson's cyclopædia; ed. by. *See* **Barnard,** F. A. P., and **Guyot,** Arnold.

MARSHES. L'influence paludeuse sur la santé et la durée de la vie. *See* **Heuschling,** M. X.

Martin, J. G. Twenty-one years in the Boston stock-market, or fluctuations therein, from 1835 to 1856. 8°. *Boston*, 1856.

Martin, Philipp Leopold. Naturstudien. Die botanischen, zoologischen und Akklimatisationsgärten, Menagerien, Aquarien und Terrarien in ihrer gegenwärtigen Entwickelung, nebst Vorschlägen und Entwürfen für die Anlegung von Naturgärten in kleineren Verhältnissen und grösserer Centralgärten für Natur- und Völkerkunde. Unter Mitwirkung der Direktoren zoologischer Gärten. Bearb. von. 8°. Atlas, l. 8°. *Weimar*, 1878. Th. 3. Martin's Praxis der Naturgeschichte.

MARYLAND institute. Exhibitions. The book of the exhibition: fifth, eighth, ninth annual exhibitions of the Maryland institute for the promotion of the mechanic arts. 8°. *Baltimore*, 1852-56.

——— Laws and charter of. *See* **Bacon,** Thomas.

——— Laws of, applicable in the District of Columbia. *See* **Thompson,** M.

Mason, Erskine. The manual of dissection. *See* **Holden,** Luther.

MASONRY dams, High. *See* **McMasters,** John B. **Van Nostrand's science series, No. 22.**

MASSACHUSETTS horticultural society. A catalogue of the library. 8°. *Boston*, 1873.

——— Laws relating to manufacturing corporations. *See* **Batchelder,** Samuel.

MATERIALS for cotton, linen and other fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 8.**

——— for medical and surgical history of the rebellion, Reports on the extent and nature of. *See* UNITED STATES. **War**

Digitized by Google

MATERIALS—Continued.
dept. Surgeon-general's office. Circular 6.
——— for pottery, porcelains, bricks, clays, cements. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 2.**
——— for wool and silk fabrics. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 9.**

MATHEMATICS. Differentials of functions. *See* **Rice**, M. J., and **Johnson**, W. W.
——— Organum mathematicum. *See* **Schott**, P. Gaspar.

Mathiot, G. On the electrotyping operations of the United States coast survey. 8°. *New Haven*, 1853.

MATTER and motion. *See* **Maxwell**, J. C. **Van Nostrand's science series, No. 36.**

MAURITIUS. Royal society of arts and sciences. Transactions. New series. Part 1. v. 1. Medical plants growing or cultivated in the island of Mauritius. Plantes médicinales de Maurice, indigènes ou cultivées dans les jardins. By Louis Bouton. 8°. *Mauritius*, 1857.

Maw, W. H. Engineering; ed. by. *See* **Engineering.**

Maxwell, J. Clerk. Matter and motion. 18°. *New York*, 1878. **Van Nostrand's science series, No. 36.**

Mead, Richard. A treatise concerning the influence of the sun and moon upon human bodies, and the diseases thereby produced. Trans. from the Latin by Thomas Stack. 8°. *London*, 1748.

Meade, R. W. Iron-clad ships of the world; trans. by. *See* **Dislère**, M. P.

MEASURES. *See* **Weights** and measures.
——— Metric system of weights and. *See* **Putnam**, J. P.
——— Metrical pocket-book. *See* **Dalmon**, H.
——— Science of weighing and measuring. *See* **Chisholm**, H. W.

MECHANICS and machines. Applications de la mécanique aux machines. *See* **Taffe**, A., and **Boileau**, P.

MECHANIC'S assistant, The. *See* **Knapen**, D. M.

MECHANICS. Atlas der mechanischen Technik. *See* **Hartig**, E., and **Weiss**, T.
——— Atmospheric phenomena relating to. *See* **Rucker**, James M.

MECHANICS. Economy of workshop manipulation. *See* **Richards**, J.
——— The elements of mechanism. *See* **Gooden**, T. M. **Textbooks of science, No. 6.**
——— Lehrbuch der mechanischen Technologie. *See* **Hoyer**, Egbert.
——— of ventilation. *See* **Rafter**, George W. **Van Nostrand's science series, No. 33.**
——— Problems of practical importance in. *See* **Vogdes**, William. Treatise on mensuration.

MEDICAL education and institutions in the United States of America; by N. S. Davis. *See* UNITED STATES. **Interior dept.** Bureau of education.
——— electricity, Practical principles of. *See* **Clark**, Daniel.
——— galvanism, A guide to the correct administration of. *See* **Horne**, J. H.
——— ——— Remarks on. *See* **Remarks.**
——— hints for the people; a few facts worth knowing. 18°. *Chicago*, 1866. pp. 44.
——— (The) news. v. 24–35. 1866–77. [v. 30, 32, missing.] 8°. *Philadelphia*, 1866–77——.
——— news lectures. v. 1–7. 8°. *Philadelphia*, 1867–76.
v. 1. On railway and other injuries of the nervous system. By J. E. Erichsen. 1867.
2. Lectures on the study of fever. By A. Hudson. 1869.
3. On the wasting diseases of infants and children. By Eustace Smith. 1870.
4. On diseases of the spine and of the nerves. By C. B. Radcliffe, J. N. Radcliffe, J. W. Begbie, F. E. Anstie, and J. R. Reynolds. 1871.
5. On the treatment of diseases of the skin. By McC. Anderson. 1873.
6. The diseases of the stomach. By W. Fox. 1875.
7. Lectures on fever. By W. Stokes. 1876.

MEDICINAL plants in Mauritius. *See* MAURITIUS. **Royal** society.

MEDICINE. Every man his own physician; receipts, etc. *See* **Reddle**, S.
——— Galvanism in chronic diseases. *See* **La Beaume**, M.
——— Hippocrates upon air, water and situation. *See* **Clifton**, Francis.
——— Hygiène et médecine vétérinaires militaires. *See* FRANCE. **Département de la guerre.**

Digitized by Google

MEDICINE. The influence of the sun and moon upon human bodies, and diseases thereby produced. *See* **Mead,** Richard.

——— Instruments and apparatus of. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 24.**

——— The invalid's oracle. *See* **Kitchiner,** W.

——— Lexicon nosologicum polyglotton. *See* **Nemnich,** P. A.

——— Master-mariner's guide, etc. *See* **Bond,** J. B.

——— Medical and physical researches. *See* **Harlan,** R.

——— Medical history of the war of the rebellion. *See* UNITED STATES. **War dept. Surgeon-general's office.**

——— The medical news. *See* **Medical.**

——— Medical news lectures. *See* **Medical.**

——— Medicin. Fleischl. *See* PHILADELPHIA, etc **Bericht Oesterr. Comm. Weltausst. 1876. Heft 3.**

——— New remedies. *See* **New.**

——— Popular medical errors. *See* **Harrison,** J. B.

——— The science and practice of. *See* **Aitken,** W.

——— Dr. Skinner's last medical offering. *See* **Skinner,** —.

——— Syphilisationen, studeret ved Sygesengen. *See* **Boeck,** Wilhelm.

——— A treatise on the venereal disease. *See* **Hunter,** John.

——— Vital-atomic surgery, etc. *See* **Everitt,** L. H.

Meigs, Charles D. Complete treatise on midwifery; trans. by. *See* **Velpeau,** Alf. A. L. M.

Meijlink, B. Magazijn van voorschriften behelzende de nieuwste ontdekkingen in verschillende kunsten en wetenschappen. 8°. *Te Deventer,* 1830.

Meissner, G. Die Hydraulik und die hydraulischen Motoren. B. 1. 8°. *Jena,* 1878.

MENSURATION, Elementary treatise on. *See* **Vogdes,** William.

——— Elements of trigonometry, with applications to. *See* **Loomis,** Elias.

——— Hawney's complete measurer. *See* **Hawney.**

——— Treatise on. *See* **Knapen,** D. M. The mechanic's assistant.

Mercantile library of Brooklyn, Catalogue of. *See* BROOKLYN.

Mercator's atlas. Historia mundi. *See* **Hondy,** Judocus.

MERCURY. Aufnahme des Quecksilbers etc. in den Kreislauf. *See* **Hoffmann,** C. E. H.

MERIDIAN and altitude instrument. Description of the dipleidoscope. *See* **Dent,** E. J.

Merrill, A. P. The cholera pestilence. 12°. *New York,* [1865]. pp. 27.

Merriman, Mansfield. Theory and calculation of continuous bridges. *Illus.* 18°. *New York,* 1876. **Van Nostrand's science series, No. 25.**

METALLURGY. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 1.**

——— Fortschritte des metallurgischen Hüttengewerbes. *See* **Hartmann,** Carl F. A.

——— Roh- und Stabeisen-Fabrikation. *See* **Hartmann,** Carl F. A.

METALS. British manufacturing industries, v. 7.

——— Economy of Portland-cement-concrete combined with iron. *See* **Hyatt,** Thaddeus.

——— Fatigue of, under repeated strains. *See* **Spangenberg,** Ludwig. **Van Nostrand's science series, No. 23.**

——— Machine tools. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 21.**

——— Working. Handbuch der Metallwaaren-Fabrikation. *See* **Abbass,** F. W. **47, 48 Neuer Schauplatz der Künste.**

METEOROLOGY. Army meteorological register. *See* UNITED STATES. **War department.**

——— in Norway. Beobachtungen auf Christiania's Observatorium. *See* CHRISTIANIA. **Observatorium.**

——— its connection with hypsometry. *See* **Williamson,** R. A. On the use of the barometer. UNITED STATES. **War dept. Prof. papers on eng., No. 15.**

——— The mariner's atmospherical register. *See* **Mariner's.**

——— Météorographe universel. *See* **Baumhauer,** E. H. v.

——— Meteorological observations in Utah, etc. *See* **Gannett,** Henry.

——— Observations at the Toronto observatory. *See* GREAT BRITAIN. **Magnetic and meteorological observatory.**

——— Observations for twenty years. *See* TASMANIA. **Royal observatory.**

Digitized by Google

METEOROLOGY. Osservazioni magnetiche e meteorologiche. *See* GENOA. **Osservatorio.**

——— Results of meteorological observations. *See* **Abbott,** Francis.

——— Resúmen de los trabajos meteorologicos. *See* **Rigo y Sinobas,** Manuel.

——— Thunder and lightning. *See* **Fonvielle,** W. de. **Illustrated library of wonders, v. 6.**

——— Weather forecasts and storm prevision. *See* **Strachan,** R.

——— Witterung in Österreich, etc. *See* AUSTRIA. Central-Anstalt.

METEORS. Über Sternschnuppen und Feuerkugeln. *See* **Wolf,** Rudolf.

METHINE. Methintrisulfonsäure. *See* **Theilkuhl,** M.

METRIC system. Beretning om den internationale Meterkommissions Møde i Paris, 1872. *See* **Broch,** O. J.

——— ——— explained and adapted to the systems of instruction in the United States. *See* **Davies,** Charles.

——— ——— in United States marine hospital service. Rules for converting apothecaries' weights and measures to metric equivalents. *See* **Oldberg,** Oscar.

——— ——— Metric manual for schools; the decimal system. *See* **Sawyer,** Henry E.

——— ——— Metrical pocket-book, containing the principles of the. *See* **Dalmon,** H.

——— ——— of weights and measures. *See* **Putnam,** J. P.

——— ——— Vaegtsammenligninger af Kilogrammer, etc. *See* **Broch,** O. J.

MICHIGAN. State board of health. Annual report of the secretary, for the years 1874–76. 8°. *Lansing,* 1874–76.

MICROMETERS, Description of several new. *See* **Brewster,** D.

MICRO-photography. Grundzüge der Mikrophotographie. *See* **Hauer,** Max.

MICROSCOPES. Microscopes achromatiques simplifiés. *See* **Lerebours,** N. P.

——— Mikroskope. Fleischl. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 3.**

——— Mikroskopische Praeparate. *See* Engell und co.

MICROSCOPY, American journal of. *See* **American.**

——— Einleitung in die technische Mikroskopie. *See* **Wiesner,** Julius.

MIDDLINGS purifiers, Digest of. *See* **Allen,** De Witt C.

MIDWIFERY, Complete treatise on. *See* **Velpeau,** Alf. A. L. M.

Mierziński, Stanislaus. Die Conservirung der Thier- und Pflanzenstoffe (Nahrungsmittel, etc.) *Illus.* 8°. *Berlin,* 1878.

Migerka, F. Das Unterrichtswesen in den Vereinigten Staaten. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876. Heft 11.**

MILAN. Annali d'agricoltura e giardiniere. T. 1°. Sem. 1°. 8°. *Milano,* 1854.

——— Atti della fondazione scientifica Cagnola. T. 3–5. 8°. *Milano,* 1860–71.

——— Il giardiniere. Giornale d'orticultura. Anno 2° e 3°. 8°. *Milano,* 1852–54.

MILITARY arms. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 16.**

——— hospitals. Les services des officiers dans les hôpitaux militaires. *See* **Dubois,** M.

——— posts, barracks and hospitals, Report on. *See* UNITED STATES. **War dept. Surgeon-general's office. Circular 4.**

——— science. On the use of the barometer in surveys and reconnaissances. *See* **Williamson,** R. S. UNITED STATES. **War dept. Professional papers on engineering, No. 15.**

——— tactics, in question and answer. *See* **Van Ness,** W. W.

MILK analysis. *See* **Wanklyn,** J. A.

——— ——— Chemie und Prüfung der Kuhmilch. *See* **Goppelsroeder,** F.

——— cream and butter. Le lait, la crème et le beurre. *See* **Husson,** C.

Miller, —, and **Ravenhill,** —. Engines of the Isis. *See* **Tredgold,** T. **Steam** navigation. App's E and F.

MILLS. Groot Algemeen Moolen-Boek. *See* **Zyl,** Johannes Van.

——— Mehl-, Stampf-, Öel- und Säge-Mühle. *See* **Scharrath,** W., and **Schröder,** H.

Milz, B. Die Rauchwaarenfärberei in ihrem ganzen Umfange. 8°. *Leipzig,* 1874.

MINE-gas diseases. Erkrankungen durch Minen-Gase. *See* PRUSSIA. **Kriegsministerium.**

Miner, T. B. An essay on winter management of bees, with rules for feeding, and for the treatment of diseased brood; with

Digitized by Google

Miner, T. B.—Continued.
a plan for the certain destruction of the moth, etc. 18°. *Utica, New York,* 1851.

MINERAL waters. Darstellung künstlicher Mineralwässer. *See* **Weiss,** T.

——— ——— of Chile, Report on. *See* **Smith,** J. Lawrence.

MINERALOGY, Blow-pipe analysis and determinative. *See* **Elderhorst,** William.

——— A dictionary of chemistry and. *See* **Ure,** Andrew.

——— Report on minerals and mineral waters of Chile. *See* **Smith,** J. Lawrence.

Mineralquelle (Die) zu Niederselters. 8°. *Wiesbaden, n. d.*

MINERALS. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 1.**

MINES, Employment of children in. *See* GREAT BRITAIN. Children's employment commission.

Minifie, William. A textbook of geometrical drawing, etc.; with an introduction to isometrical drawing. *Illus.* 12°. *Baltimore,* 1849.

MINING. British manufacturing industries, v. 7.

——— *See* PHILADELPHIA. **Internat. exhib. 1876. Group 1.**

——— and milling in the Reese river region, Nevada. *See* **Blatchly,** A.

——— and smelting. Fortschritte der berg- und hüttenmännischen Wissenschaften. *See* FREIBERG.

——— Annales des mines. *See* PARIS. **Conseil général des mines.**

——— Engineering and, journal. *See* **Engineering.**

——— Exploitation des mines. *See* **Burat,** Amédée.

——— Hüttenberger Erzberg. *See* **Seeland,** F.

——— Leitfaden zur Bergbaukunde. *See* **Lottner,** H., and **Serlo,** Albert.

——— Metallic. **British manufacturing industries, v. 2.**

——— The surface gold miner's manual. *See* **Surface.**

MINNESOTA, Geological survey of. *See* **Owen,** D. D.

——— History of. *See* **Neill,** Edward Duffield.

MISSISSIPPI (The) and Ohio rivers. *See* **Ellet,** Charles.

Mitchell, Thomas. A course of lectures delivered in the city of Albany, on the newly discovered science of electrical psychology. 12°. *Lansingburgh,* 1849.

MODELLING in paper, The art of architectural. *See* **Richardson,** T. A. **Weale's series, No. 127.**

——— Knight's scroll ornaments, for use of modellers, etc. *See* **Knight's.**

Moigno, M. Stéréoscope et pseudoscope. 8°. *Paris,* 1852.

Monckhoven, D. Photographie au charbon. 8°. *Paris,* 1876.

Monroe, Lewis B. Manual of physical and vocal training, etc. Illustrated by Hammatt Billings. 12°. *Philadelphia,* 1869.

MONTANA. Meteorological observations in Montana, etc. *See* **Gannett,** Henry.

——— Reconnaissance from Carroll, Montana, to Yellowstone national park. *See* UNITED STATES. **War dept. Bureau of engineers.**

MONUMENTS. Schleifen, Poliren etc. des Marmors, zu Monumenten. *See* **Weber,** Martin. **268 Neuer Schauplatz der Künste.**

Moor, V. P. G. de. Graminées céréales et fourragères. 12°. *Bruxelles,* 1854.

Moore, John William. Lectures on fever; ed. by. *See* **Stokes,** William. **Medical news lectures, v. 7.**

Morse, Samuel B., Life of. *See* **Prime,** S. I.

MORTALITY and sickness of the army during the first year of the war. *See* UNITED STATES. **War dept. Surgeon-general's office. Circ. 15.**

MORTARS, Hydraulic and common. *See* **Treussart,** —, **Petot,** —, and **Courtois,** —.

MOTHER of pearl, The inlaying of. *See* **Freeman,** Henry S.

MOTORS. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 20.**

MOUNTAIN railway. Bergbahn und Bergbahn-Locomotiven mit einfacher Adhäsion. *See* **Tobler,** J.

MULBERRY. Culture du mûrier sauvage. *See* **Nourrigat,** Émile.

Mullins, J. D. Birmingham free libraries. Catalogue of the reference department. 8°. *Birmingham,* 1869.

MUNICH. Commission für Wasserversorgung etc. Verhandlungen und Arbeiten der Commission für Wasserversorgung,

Digitized by Google

MUNICH—Continued.
Canalisation und Abfuhr. Bericht 1-2. Für die Jahren 1874-77. *Illus.* 4°. *München*, 1874-77——.

Munroe, Henry S. Geological survey of Hakkaido. The gold fields of Yesso. Report by. 8°. *Tokei*, 1875.

——— Yesso coals. Report by. 8°. *Tokei*, 1874. pp. 39.

Munger, James F. Two years in the Pacific and Arctic oceans and China; being a journal of every day life on board ship, and the exciting events peculiar to a whaling voyage. 8°. *Vernon*, 1852.

MUSIC. Harmonium tutor. *See* **Engel,** Louis.

——— Instruments of. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 25.**

——— trade. The American bookseller. *See* **American.**

MUSICAL instruments. **British manufacturing industries, v. 11.**

——— ——— Die Fabrikation musikalischer Instrumente. *See* **Berthold,** Theodor, and **Fürstenau,** Moritz.

Musterzeichnungen für Techniker. [Collections of plates, with explanatory text in 12°; without title-page or imprint.] 10 Bde. fol.

Taf. 1- 79. Wasserräder und Göpel.
116-135. Ornamente.
218-228. Pressen.
304-311. Grabsteine.
342-355. Dachdeckerarbeiten etc.
368-373. Buchbinderwerkzeuge.
384-437. Wagnerarbeiten.
443-448. Gesimse.
449-532; 617-641. Möbel und Baupläne.

MYCENÆ and Tiryns, Discoveries at. *See* **Schliemann,** Henry.

Nägeli, Carl. Entstehung und Begriff der naturhistorischen Art. 12°. *München*, 1865.

NAILS. British manufacturing industries, v. 3.

NAPHTHALINE. Das Naphtalin und seine Derivate. *See* **Balló,** M.

National board of trade. Proceedings of the first annual meeting of the board of trade held in Cincinnati; Dec., 1868. 8°. *Boston*, 1869.

——— magazine and industrial record. *See* **Fisher,** R.

NATIONALITY. Principio di nazionalità. *See* **Palma,** Luigi.

NATURAL history. *See* **Field and forest.**

NATURAL history. Naturhistorische Art. *See* **Nägeli,** Carl.

——— ——— Naturhistorischer Verein in Passau. *See* PASSAU.

——— ——— Naturstudien. *See* **Martin,** P. L.

——— science. Gesellschaft der Naturwissenschaften. *See* MARBURG.

NATURE and man. Naturautokratie im Menschen. *See* **Kretzschmar,** E.

——— and medicine. Deutsche Naturforscher und Ärzte. Versammlungs-Bericht. *See* **Krause,** —, and **Karmarsch,** —.

——— Neuer Schauplatz der Natur. *See* LEIPZIG. Gesellschaft von Gelehrten.

——— The sublime in. *See* **Lanoye,** Ferdinand de. **Illus. library of wonders, v. 12.**

Nava, D., and **Selmi,** G. F. Memoria sul caglio vitellino. 8°. *n. t. p.*

NAVAL constructions. Constructions navales. *See* **Arman,** L.

NAVIGATION. Ancient vessel found in Norway. *See* **Ancient.**

——— Elements of trigonometry, with applications to. *See* **Loomis,** Elias.

——— through the Gulf Stream, Thermometrical. *See* **Thermometrical.**

Naylor, Benjamin. The speedy calculator. 12°. *Philadelphia*, 1850. Also, ed. 1850, [with key].

NEBRASKA, Explorations in, 1855-57. *See* **Warren,** G. K. UNITED STATES. **War dept. Bureau of engineers.**

——— Geological survey of a portion of. *See* **Owen,** D. D.

NEEDLES. British manufacturing industries, v. 3.

Neill, Edward Duffield. The history of Minnesota: from the earliest French explorations to the present time. 8°. *Philadelphia*, 1858.

Nemnich, Philipp Andreas. Lexicon nosologicum polyglotton omnium morborum, symptomatum vitiorumque naturae et affectionum propria nomina decem diversis linguis explicata continens auctore Philippo Andrea Nemnich. sm. fol. *Hamburgi*, 1801.

NERVES, Diseases of the. *See* **Radcliffe,** C. B., and others. **Medical news lectures, v. 4.**

NERVOUS affections, Diagnosis and treatment of functional. *See* **Brown-Séquard,** C. E.

Digitized by Google

NERVOUS system, Physiology of. *See* **Haskell**, Benjamin.

——— ——— Railway and other injuries of. *See* **Erichsen**, John Eric. **Medical news lectures, v. 1,**

NETHERLANDS, Agriculture in the. *See* **Verslag.**

——— Bechler's map of. *See* **Bechler**, G. R.

Neuberger, Ferdinand. Der Farbendruck auf der Steindruckpresse. *Illus.* 8°. *Berlin, n. d.*

NEURALGIA. *See* **Medical news lectures, v. 4.**

——— and its remedies. *See* **Anstie**, F. E.

NEVADA, Mining and milling in. *See* **Blatchly, A.**

NEWARK (N. J.) industrial exhibition. Report and catalogue of the first exhibition of Newark industries, 1872. 8°. *Newark*, [1872].

Newberry, J. S. Exploring expedition from Santa Fé. Geological report. *See* UNITED STATES. **War dept. Bureau of engineers.**

NEWBURGH. Directory, 1856, 1857. *See* **Wilson**, H.

New England (The) business directory. 8°. *Boston*, 1865.

NEWFOUNDLAND, Newspapers in. American newspaper directory. *See* **Rowell**, George P.

NEW JERSEY. Geological survey. Annual reports, 1854; 1869. *Illus.* 8°. *Trenton*, 1855–69.

——— Good order established in. *See* **Budd**, Thomas.

New remedies. A monthly trade journal of materia medica, pharmacy and therapeutics. Fred'k A. Castle, editor; Charles Rice, associate ed. v. 5, 6. roy. 8°. *New York*, 1876–77.

NEWSPAPERS. American newspaper directory. *See* **Rowell**, G. P.

Newton, Isaac. View of Sir Isaac Newton's philosophy. *See* **Pemberton.**

Newton, Sereno. Engineers, millwrights and machinists' tables. 12°. *New York*, 1850.

NEW YORK (state). Documents relative to the colonial history; procured in Holland, England and France, by John Romeyn Brodhead, agent. Ed. by E. B. O'Callaghan; with a general introduction by the agent. v. 1–10. 4°. *Albany*, 1856–58. General index, 1861.

NEW YORK (state). Geological survey. Geological and mineralogical reports, 1837–41. 5 v. 8°. *Albany*, 1840–41.

——— ——— History. Journal of Isaac Norris. *See* **Norris**, J. P.

Neyt, P. J. De Afdamming van het Sloe. Voorlezing gehouden in het Zeeuwsch genootschap der wetenschappen. 8°. *Middelburg*, 1873.

NICARAGUA. Route for ship canal. *See* **Sonnenstern**, M. von.

Nichols, James R. Chemistry of the farm and the sea, with chemical essays. 12°. *Boston*, 1867.

Nicholson, E. B., and **Tedder,** H. R. Transactions and proceedings of the conference of librarians held in London, Oct., 1877. Ed. by secretaries of the conference. 4°. *London*, 1878.

Nicodemus, W. J. L. Handbook for charcoal burners. *See* **Svedelius**, G.

NIGHT-soil, Report on the disposition of. *See* **Lee**, William.

Noble, —, and **Abel,** F. A. Researches on explosives. Fired gunpowder. From the Philosophical transactions of the Royal society. Part 1, 1875. 4°. *London*, 1875.

Noordziek, J. J. F. Het Geschiltstuck betrekkelijk de Uitvinding der Boekdrukkunst. 8°. *Haarlem*, 1848.

Norman, J. M., and **Pettersen,** K. Det Kongelije Norske Videnskabers-Selskabs Skrifter i des 19de Aarhundrede. 7de B. *Illus.* 8°. *Throndjem*, 1872.

Norris, Isaac, Journal of. *See* **Norris**, J. P.

Norris, J. P. The journal of Isaac Norris, during a trip to Albany, in 1745. 8°. (fold. 4°). *Philadelphia*, 1867. pp. 31.

NORSE language. Norsk og Keltisk. *See* **Holmboe**, C. A.

——— ——— Det oldnorsk Verbum. *See* **Holmboe**, C. A.

NORTH AMERICA, Agricultural, economical and social notes on. *See* **Johnston**, J. F. W.

NORTH CAROLINA. Geological survey. Agriculture of the eastern counties, with descriptions of the fossils of the marl beds. By Ebenezer Emmons. 8°. *Raleigh*, 1858.

——— Historical sketches of. *See* **Wheeler**, John H.

Digitized by Google

Northern Pacific railroad. Memorial of the board of directors, Nov., 1867. 8°. *Hartford*, 1867.

Norton, C. B. Literary gazette; ed. by. *See* **Literary.**

NORWAY, Ancient vessel found in. *See* **Ancient.**

——— Departementet for det Indre. Patenter. Bekjendtgiörelse fra Departementet for det Indre. Fölger Polyteknisk Tidsskrift for 1876. 23de Årgang. 4°. *Christiania*, 1876.

——— Synopsis of the vegetable products. *See* **Schübeler,** F. C.

NOSOLOGY. Lexicon nosologicum polyglottou. *See* **Nemnich,** P. A.

Nourrigat, Émile. Avantages de la culture du mûrier sauvage à grandes feuilles, sur celle du mûrier greffé. Mémoire presenté à l'Académie des sciences. 4°. *Montpellier*, 1863.

Nystrom, John W. A new treatise on steam engineering, physical properties and permanent gases, and of different kinds of vapor. 8°. *Philadelphia*, 1876.

OBSTETRICS. Complete treatise on midwifery. *See* **Velpeau,** Alf. A. L. M.

——— A directory for midwives *See* **Culpeper,** N.

O'Callaghan, E. B. Documents relative to the colonial history of New York; ed. by. *See* NEW YORK (state).

OCEAN steam navigation and the ocean post. *See* **Rainey,** Thomas.

ODONTOGRAPH, Theory of the use of Robinson's. *See* **Robinson, S. W. Van Nostrand's science series, No. 24.**

OHIO river. The Mississippi and Ohio rivers. *See* **Ellet,** Charles.

Ohnesorge, H. Das Wasserwerk der Stadt Bremen. *See* **Böttcher,** Emil, and **Ohnesorge,** H.

OIL, Castor. Olio di ricino volgare. *See* **Bonelli,** Giorgio.

OILS. British manufacturing industries, v. 4.

Oldberg, Oscar. Rules for converting apothecaries' weights and measures into metric terms, and suggestions for writing metric prescriptions. *See* UNITED STATES. **Treasury** dept. Marine hospital.

OLIVE oil. Huile d'olive. *See* **Sieuve,** M.

Olver, J. S. Tables for setting out curves on railways and other public works; calculated in chains and links. [One large sheet.] *London*, 1860.

Opie, John. Lectures on painting delivered at the Royal academy of arts; with a letter on the proposal for a public memorial of the naval glory of Great Britain. To which is prefixed a memoir of Mrs. Opie, and other accounts of Mr. Opie's character and talents. 4°. *London*, 1809.

OPIUM trade in India and China. *See* **Allen,** Nathan.

Oppley, Edwin. Die Kunst im Gewerbe. B. 1. Jahrg. 1872. 4°. *Hannover*, 1872.

ORIGIN and progress of galvanism, or voltaic electricity. 8°. *n. t. p.*

ORNAMENT, Floriated. *See* **Pugin,** A. W.

ORNAMENTAL design, Essay on. *See* **Hay,** D. R.

——— objects, Machines, apparatus, implements used in. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 22.**

ORNAMENTS. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 10.**

———, and interior decorations. *See* **Chippendale.**

——— from manuscripts of the middle ages. *See* **Shaw,** Henry.

——— Knight's scroll ornaments. *See* **Knight's.**

——— Ornamente. *See* **Musterzeichnungen** für Techniker.

ORNITHOLOGY. Ornitologiska Bidrag. *See* **Lilljeborg,** W.

Otis, George A. Report on the transport of sick and wounded on pack animals. *See* UNITED STATES. **War dept. Surgeon-general's office. Circ. 9.**

Ott, Adolf. Beleuchtung der Gründe wider den Erfindungsschutz, nebst Darlegung des Patentwesens in den Vereinigten Staaten von Nord-Amerika. 12°. *Schaffhausen*, 1874.

Outlines of English grammar. On the basis of the Anglo-Saxon. By a literary association. 12°. *New York*, 1853.

Owen, David Dale. Report of a geological survey of Wisconsin, Iowa and Minnesota; and, incidentally, of a portion of Nebraska territory. Made under instructions from the United States treasury department. 4°. *Philadelphia*, 1852.

OXYGEN. Der Sauerstoff. *See* **Philipps,** Joseph.

Digitized by Google

PAINTING. Deutsches Maler-Journal. *See* **Gnauth**, A., and **Lesker**, L.

——— Lectures on. *See* **Opie**, John.

——— The painter. *See* **Guide** to trade.

——— Sentimens des plus habiles peintres sur la pratique de la peinture et sculpture. *See* **Testelin**, Henry.

PAINTS, Manufacturing and grinding. *See* **Quarterman**, James.

Palma, Luigi. Del principio di nazionalità nella moderna società Europea. 8°. *Milano*, 1867.

PAPER. British manufacturing industries, v. 7.

——— and paper making. Historical account of substances used from the earliest dates. *See* **Koops**, Matthias.

——— coloring. Coloration des pâtes à papier, et fabrication de papiers de tenture. *See* **Piette**, Louis.

——— hangings and wall paper. Tapeten und Buntpapier. Von Wilhelm F. Exner. *See* VIENNA. **Gen.-Dir. der Weltausst. 1873. Bericht. Gruppe 11.**

——— industry. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 13.**

——— Het Papier in de Nederlanden gedurende der middeleeuwen. *See* **Stoppelaar**, J. H.

PAPIER-mâché. **British manufacturing industries, v. 3.**

Paré, Ambroise. Œuvres complètes, revueset collationnées sur toutes les éditions avec les variantes, ornées d'un portrait de l'auteur; accompagnées de notes historiques et critiques et précédées d'une introduction sur l'origine et les progrès de la chirurgie en occident du sixième au seizième siècle, et sur la vie et les ouvrages d'Ambroise Paré, par J. F. Malgaigne. T. 1-3. 8°. *Paris*, 1840-41.

PARIS. Chambre de commerce. Statistique de l'industrie à Paris, résultant de l'enquête faite par la chambre de commerce, pour 1847-48. 4°. *Paris*, 1851.

——— Concours agricole universel de 1856. Catalogue des animaux, machines, instruments et produits exposés. 8°. *Paris*, 1856.

——— École impériale des pontes et chaussées. Collection des dessins distribués aux élèves. Série 5e. Navigation intérieure. Série 6e. Ports maritimes. Série 7e. Architecture. Série 8e. Travaux d'assainissement des villes. fol. *Paris, n. d.*

PARIS—Continued.

——— Ministère de l'agriculture, etc. Concours d'animaux reproducteurs et de boucherie en 1853-56. Compte rendu. *Illus.* T. 1-4. 4°. *Paris*, 1853-56.

——— Report on the cholera in. *See* **Report.**

——— Société royale d'horticulture. Annales. État et progrés du jardinage. 8°. *Paris*, 1844-50.

PARTS of building. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 6.**

Pascal, Cordenons. Le problème de la navigation aérienne. Solution par. 8°. *Verone*, 1868. pp. 15.

PASSAU. Naturhistorischer Verein. Jahresberichte. B. 1-4. 8°. *Passau*, 1863-74.

PATENT law, British colonial. *See* GREAT BRITAIN. **Great seal** patent office. Information as to the mode of obtaining protection.

——— ——— British colonial. Forms of application. *See* GREAT BRITAIN. **Great seal** patent office. Abstracts of replies, etc.

——— ——— Deutsches Patentrecht. *See* **Kohler**, J.

——— ——— of Buenos Ayres. Ley de patentes de invencion, etc. *See* BUENOS AYRES.

——— ——— Die Patent-Reform. *See* **Wirth**, Franz.

——— ——— Report and evidence on bill for amending the law of. *See* GREAT BRITAIN. **Parliament.**

——— ——— Report of commissioners appointed to inquire into the working of the law of. *See* GREAT BRITAIN. **Parliament.**

——— office library. Catalogue of 1847. *See* UNITED STATES. **Interior** dept. Patent office.

PATENTS and the useful arts. *See* **Howson**, Henry.

——— and other privileges for inventions, etc.

AUSTRIA. Verzeichniss der ausschliessenden Privilegien von dem K. K. Privilegien-Archive. Jahre 1854-68.

——— Catalog der vom K. K. Privilegien-Archive registrirten Privilegien. Jahre 1869-76.

——— *See, also*, AUSTRIA.

GERMANY. Patent-Blatt. (Weekly.) 1877——.

NORWAY. Patenter. [For 1876—no numbering.]

——— *See, also*, NORWAY.

Digitized by Google

PATENTS (for invention). Digest of cartridges for small arms. *See* **Bartlett**, W. A., and **Gallatin**, D. B.

——— Gründe wider den Erfindungsschutz. *See* **Ott**, A.

——— Ley de patentes de invencion. *See* BUENOS AYRES.

——— Notes for the guidance of inventors. *See* **Wise**, W. Lloyd.

——— Patent-System der Vereinigten Staaten von Nord Amerika. *See* **Königs**, G.

——— Preliminary information respecting applications for. *See* **Eddy**, R. H.

——— Report of the commissioner of, C. S. A., for year 1863. *See* CONFEDERATE STATES [so-called].

——— Rules for practice in the United States patent office. *See* UNITED STATES. **Interior** dept. Patent office.

——— Uebersicht über die in Württemberg in den Jahren 1864, 1865, 1866, ertheilten und erloschenen Patente. *n. t. p.*

Patterson, R. H. Gas and lighting. **British manufacturing industries, v. 4.**

Payne, Uriah. The farmer's guide and bee-cultivator; containing directions for using Payne's improved bee-hive, etc. 32°. *Maine, N. Y.*, 1855. pp. 7.

Peabody, Elizabeth P. The Polish-American system of chronology; reproduced from Gen. Bem's Franco-Polish method. [With a chart.] 12°. *Boston*, 1850.

PEAR-blight, Essay on. *See* **Brainerd**, Jehu.

PEAT gas. Torfgasfeuerung. *See* **Stegmann**, H.

Peltz, E., and **Habich**, R. Handbuch für Bierbrauer und Mälzer. *Illus.* 8°. *Braunschweig*, 1876.

Pemberton, Henry. A view of Sir Isaac Newton's philosophy. 4°. *London*, 1728.

Pen (The) and lever. [Weekly.] Ed. by E. P. Hudson and Co. v. 1, Nos. 1-28, 1856. 4°. *Washington*, 1856.

Penn (The) monthly; devoted to literature, sciences, art, and politics. v. 1-8, 1870-77. [v. 1 is entitled: The Penn monthly magazine.] 8°. *Philadelphia*, 1870-77——.

PENNSYLVANIA. Geological survey. 2d and 3d annual reports, 1838, 1839; by Henry D. Rogers. 8°. *Hamburg*, 1838-39.

——— ——— The geology of Pennsylvania. A government survey; with a general view of the geology of the United States, essays on the coal-formation and its fossils, and a description of the coal-fields of North America and Great Britain. By Henry Darwin Rogers. v. 1; v. 2, parts 1-2. 4°. [With atlas, 4°.] *New York*, 1868.

——— Good order established in. *See* **Budd**, Thomas.

——— State business directory. *See* **Reilly's**.

Penny (The) cyclopædia of the Society for the diffusion of useful knowledge. v. 1-27. imp. 8°. *London*, 1833-43. [Bound in 14 v.]

——— Same. Supplement, v. 1-2. imp. 8°. *London*, 1846-51.

PENS. British manufacturing industries, v. 3.

Perels, Emil. Handbuch des landwirthschaftlichen Wasserbaus. *Illus.* 8°. *Berlin*, 1877.

——— Die landwirthschaftlichen Geräthe und Maschinen. *See* PHILADELPHIA, etc. **Bericht Oester. Comm. Weltausst. 1876, Heft 1.**

PERFUMERY, A comprehensive treatise on. *See* **Cristiani**, R. S.

PERIODICALS.

Commercial and financial chronicle. (Weekly.) *New York*, 1871-72. 4 v. *See* **Commercial.**

Hunt's merchant's magazine. (Monthly.) 69 v. *New York*, 1839-70. *See* **Hunt**, F.

Industrial art; a monthly review of technical and scientific education, etc. (Monthly.) *London*, 1878——. *See* **Industrial.**

The reader. 6 v. *London*, 1863-65. *See* **Reader.**

The southern quarterly review. 11 v. *Charleston*, 1850-55. *See* **Southern.**

——— published in America, Directory of. *See* **Rowell**, G. P.

Perkins, F. B. Putnam's library companion; a quarterly summary, giving classified lists of the English and American publications of the past year, with brief analyses or characterizations of the more important books; being a quarterly continuation of 'The best reading'. v. 1, 1877. 8°. *New York*, 1877.

PERPETUAL motion. Invention of waterworks; perpetual motion proposed. *See* **Caus**, Isaak de.

Perry, John, Life of. *See* **Smiles**, Samuel. **Lives of the engineers, v. 1.**

PETROGRAPHY. Elemente der Petrographie. *See* **Lasaulx**, A.

Digitized by Google

PETROLEUM. Die Petroleum- Industrie Nordamerikas. Höfer. *See* PHILADELPHIA, etc. **Bericht Oester. Comm. Weltausst. 1876, Heft 8.**

Pettenkofer, Max. Beziehungen der Luft zu Kleidung, Wohnung und Boden. Drei Vorlesungen zu Dresden. 8°. *Braunschweig*, 1872.

Petzholdt, Alphons. Die Locomotive der Gegenwart, und die Principien ihrer Construction. *Illus.* 8°. *Braunschweig*, 1875.

Pharmaceutical (The) times; a journal of chemistry, applied to the arts, agriculture and manufactures. v. 1-3. Sept., 1846, to Nov., 1848. 4°. *London*, 1847-48.

PHARMACY. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 3.**

——— New remedies. *See* **New.**

——— Pharmaceutical directory of all the crude drugs now in use. *See* **Rudolphy,** John.

——— Pharmaceutische Waarenkunde. *See* **Goebel,** Friedrich, **Kunze,** G., and **Schenk,** E.

Phelan, Michael. The game of billiards. 2d ed. 12°. *New York*, 1857.

PHILADELPHIA. Exhibition, 1876. The world's fair. *See* **Walker,** Francis A.

Philipps, Joseph. Der Sauerstoff. Vorkommen, Darstellung und Benutzung desselben zu Beleuchtungszwecken. Verfahren der Sauerstoff-Beleuchtung. 8°. *Berlin*, 1871.

Phillips, J. Arthur. Copper smelting. **British manufacturing industries, v. 1.**

Phillips, M. Cours d'hydraulique et d'hydrostatique professé à l'école centrale par. La rédaction est de M. A. Gouilly. 8°. *Paris*, 1875.

PHILOLOGY. Introduction to the study of Indian languages. *See* **Powell,** J.W.

——— Norsk og Keltisk. *See* **Holmboe,** C. A.

——— Det oldnorske Verbum, oplyst ved Sammenligning med Sanskrit. *See* **Holmboe,** C. A.

——— Outlines of comparative. *See* **Schele de Vere,** M.

PHILOSOPHICAL instruments, A treatise on new. *See* **Brewster,** David.

——— society of Glasgow. Proceedings. v. 6-10, 1868-77. 8°. *Glasgow*, 1868-77——. [Imperfect.]

PHILOSOPHY and logic, The study of. *See* **Gerhart,** E. V.

——— in the past and the future, Progress of. *See* **Tyler,** Samuel.

——— View of Sir Isaac Newton's. *See* **Pemberton,** Henry.

PHONARTHRON, The; natural system of the sounds of speech. *See* **Henslowe,** W. H.

PHONETICS. Comstock's phonetic magazine. *See* **Comstock's.**

PHONIC text. Reading by signs of sound. *See* **Zachos,** J. C.

PHONOGRAPH, The talking. *See* **Prescott,** G. B.

PHONOGRAPHY. The phonographic reporter's first book. *See* **Andrews,** S. P., and **Boyle,** A. F.

——— Compendium of tachygraphy. *See* **Lindsley,** D. P.

PHOSPHATE rocks of South Carolina, etc. *See* **Holmes,** F. S.

PHOTOGRAPHY. British manufacturing industries, v. 8.

——— History and handbook of. *See* **Tissandier,** Gaston.

——— Photographie au charbon. *See* **Monckhoven,** D.

——— Universal-Lehrbuch der praktischen Photographie. *See* **Krüger,** Julius.

PHOTOMETER. Der Photometer erfunden und begründet. *See* **Pietschmann,** W.

PHYSICAL culture. The Indian club exercise, etc. *See* **Kehoe,** S. D.

PHYSICS and meteorology. Éléments de physique expérimentale et de météorologie. *See* **Pouillet,** M.

——— Fortschritte in Chemie, Physik, Mineralogie, etc. *See* GIESSEN. Jahresbericht.

——— or natural philosophy. *See* **Silliman,** B., *jr.*

——— Proceedings of the Royal physical society of Edinburgh. *See* EDINBURGH.

——— Traité élémentaire de physique. *See* **Despretz,** C.

PHYSIOLOGY. Medical and physical researches. *See* **Harlan,** R.

——— Practical. *See* **Jarvis,** E.

Piesse, Charles H. Chemistry of the brewing-room; being the substance of a course of lessons to practical brewers. With tables of alcohol extract, and original gravity. *Illus.* 12°. *London*, 1877.

Digitized by Google

Pim, Bedford. Ship building. **British manufacturing industries. v. 10.**

PINS. British manufacturing industries, v. 3.

——— Machines, apparatus, and implements used in making. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 22.**

Pitcher, —. The Isis. *See* **Tredgold, T. Steam navigation. Apps. E and F.**

Plantamour, E. Résumé des observations thermométriques et barométriques faites à l'observatoire de Genève et au Grand St.-Bernard, pendant 1841–50; suivi de tables hypsométriques. 4°. *Genève*, 1851.

PLANTS and animals. Planzen- und Thierproduction. Jahresberichte. *See* **Henneberg, W.**

——— Industrial. L'asphodèle. *See* **La Bertoche,** Pinondel.

——— of Norway. Die Pflanzenwelt Norwegens. *See* **Schübeler, F. C.**

PLASTIC art. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 27.**

PLAUEN. Gymnasium und Realschule. Jahresbericht. Schuljahr: 1858–73. 4°. *Plauen*, 1858–73.

Pleasanton, A. J. The influence of the blue ray of the sunlight and of the blue colors of the sky, in developing animal and vegetable life, in arresting disease, and in restoring health in acute and chronic disorders to human and domestic animals; as illustrated by experiments, between the years 1861–1876. 8°. *Philadelphia*, 1877.

PLUMBING. The plumber. *See* **Guide** to trade.

PNEUMATIC apparatus. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 20.**

PNEUMATICS, A treatise on. *See* **Boye,** Martin H.

Poesche, Theodor. Die Arier. Ein Beitrag zur historischen Anthropologie. 8°. *Jena*, 1878.

POLITICAL science; or the state theoretically and practically considered. *See* **Woolsey,** T. D.

Polytechnic (The) review; devoted to science as applied to the useful arts. v. 1–4, 1876–77. fol. *Philadelphia*, 1876–77———.

POLYTECHNICS. Polytechnische Zeitung. *See* **Grothe,** Hermann.

Pomet, —. A complete history of drugs, in French, by M. Pomet, chief druggist to Lewis XIV; with what is further observable on the same subject, from Mess. Tenery and Tournefort; divided into three classes; vegetable, animal and mineral; their use in physick, chemistry, pharmacy, and other arts. Illustrated with 400 cutts from life, and their names, places and countries from whence they are brought; the way to know the true from the false, their virtues, etc. A work of great use and curiosity. Done into English from the originals. 3d ed. 4°. *London*, 1737.

POMOLOGY. *See* PHILADELPHIA. **Internat. exhib. 1876. Group 36.**

——— Variétés du poirier. *See* **Liron d'Airoles,** Jules de.

Pooley, T. A. Brewing, distilling. **British manufacturing industries, v. 12.**

Poor, Henry V. Manual of the railroads of the United States, for 1868–69; together with an appendix, containing a full analysis of the debts of the United States, and of the several states. *n. t. p.*

Porter, Charles T. A treatise on the Richards' steam-engine indicator (manufactured by Elliott, Bros., London,) and the development of force in the steam-engine. *Illus.* 3d ed. 12°. *New York*, 1874.

PORTLAND-cement-concrete combined with iron as a building material. *See* **Hyatt,** Thaddeus.

——— ——— Manufacture of. *See* **Reid,** Henry.

——— vase, Description of the. *See* **Wedgwood,** Josiah.

Posidonius, Apamensis. De Posidonio Apamensi rerum gentium terrarum scriptore. *See* **Scheppig,** Ricardus.

Post, Julius. Zeitschrift für das chemische Grossgewerbe. Bericht über die Fortschritte der chemischen Grossindustrie. 2ter Jahrg. Heft 1–3. 8°. *Berlin*, 1877.

POTATO disease, Origin of. *See* **Liebig,** Justus.

——— plants and their diseases. *See* Schacht, Hermann.

Potter, Alonzo. The principles of science applied to the domestic and mechanic arts, and to manufactures and agriculture; with reflections on the progress of

Digitized by Google

Potter, Alonzo—Continued.
the arts, and their influence on national welfare. 12°. *Boston*, 1841.

POTTERY. Ancient terra-cottas in the British museum, 1810. *See* **Combe,** Taylor.

——— and porcelain. Description du Musée céramique de Sévres. *See* **Brongniart,** A., and **Riocreux,** D.

——— and porcelain, from early times to 1876. *See* **Elliott,** C. W.

——— Description of the Portland vase. *See* **Wedgwood,** Josiah.

Pouchet, M. Léon. Injectors; their theory and use. Trans from the French of. *Illus.* 18°. *New York*, 1877. **Van Nostrand's science series, No. 29.**

Pouillet, M. Éléments de physique expérimentale et de météorologie. 8°. *Bruxelles*, 1840.

Practical (A) treatise on dyeing and calico printing; including the latest inventions and improvements, etc., with an appendix of chemical terms, etc. By an experienced dyer, assisted by several scientific gentlemen. *Illus.* 8°. *New York*, 1846.

Prass, F. The writing reader. *See* **Gilbert,** T., and **Prass,** F.

Prescott, George B. The speaking telephone, talking phonograph and other novelties. *Illus.* 8°. *New York*, 1878.

PRESSES. Pressen. *See* **Musterzeichnungen.**

PRESSURE gauges, Description of. *See* **Boye,** M. H. Treatise on pneumatics.

Prime, Samuel Irenæus. The life of Samuel F. B. Morse, inventor of the electro-magnetic telegraph. 8°. *New York*, 1875.

PRINTING. British manufacturing industries, v. 8.

——— Invention of. *See* **De Vinne,** T. L.

——— Invention of. Uitvinding der Boekdrukkunst. *See* **Noordziek,** J. J. F.

——— Invention of. Uitvinding der Boekdrukkunst. *See* **Uitvinding.**

——— Lexicon der Buchdruckerkunst. *See* **Marahrens,** A.

PRINTING goods. Färberei und Druckerei. *See* **Pubetz,** Anton.

PROPORTIONS of the human figure. *See* **Story,** W. W.

PRUSSIA. Kriegsministerium. Commissarischer Bericht über die Erkrankungen durch Minengase, bei der Graudenzer Mineurübung, 1873. 8°. *Berlin*, 1875.

PRUSSIA. Ministerium für Handel, etc. Statistische Nachrichten von den preussischen Eisenbahnen. B. 1–10, 1854–62. 4°. *Berlin*, 1855–63.

——— Statistisches Bureau. Tabellen und amtliche Nachrichten über den preussischen Staat. B. 1–10. 4°. *Berlin*, 1851–60.

PSYCHOLOGY, Electrical. Course of lectures on. *See* **Mitchell,** Thomas.

Pubetz, Anton. Praktisches Handbuch der gesammten Färberei und Druckerei. Hersg. von. 8°. *Berlin*, [1871—]. *n. t. p.*

PUBLIC works, railways, tunnels, canals, etc., of Great Britain. *See* **Simms,** C. E.

PUDDLING. Das mechanische Puddeln nach Danks. *See* **Bodmer,** J. J.

PUERTO RICO, The stranger in the tropics; a guide for travellers in. *See* **Tyng,** D. C.

Pugin, Augustus Welby. Floriated ornament; a series of thirty-one designs. 4°. *London*, 1846.

Putnam, J. Pickering. The metric system of weights and measures. 2d ed. 8°. *Boston*, 1877.

Pynchon, Thomas Ruggles. Introduction to chemical physics; designed for the use of academies, high schools, and colleges. Containing copious lists of experiments, with directions for preparing them. New ed. *Illus.* 12°. *New York*, 1873.

PYRAMID of Egypt, The great. *See* **Seiss,** J. A.

Quarterly (The) review. v. 1–86, 1810–50. [v. 64, 80, wanting; v. 1, 2d ed.] 8°. *London*, 1801–50.

Quarterman, James. A new mode of manufacturing and grinding paints, etc.; denominated 'libras formula B'. 2d ed. 12°. *New York*, 1858.

Radcliffe, Charles Bland, **Radcliffe,** J. N., **Begbie,** J. W., **Anstie,** F. E., and **Reynolds,** J. R. On diseases of the spine and nerves. 8°. *Philadelphia*, 1871. **Medical news lectures, v. 4.**

RAILROAD construction. Tunnelbau etc. *See* **Heusinger von Waldegg,** E.

RAILROADS, Pacific. Statement of the various Pacific railroads, and account of the Union Pacific railroad excursion. *See* **Seymour,** Silas.

——— of the United States, Manual of. *See* **Poor,** H. V.

Digitized by Google

RAILWAY-bridges, Long-span and short-span. *See* **Baker**, B.

——— construction. Vorträge über Eisenbahnbau. *See* **Winkler**, E.

——— injuries of the nervous system. *See* **Erichsen**, John Erick. **Medical news lectures, v. 1.**

——— rails. Ueber Eisenbahnschienen. *See* **Kerpely**, A.

——— St. Gotthard. Technische Vorarbeiten der Gotthardbahn. *See* **Wetli**, K.

RAILWAYS. British manufacturing injuries, v. 10.

——— and the public. *See* **Brandon**, R.

———Bahnhöfe und Hochbauten auf Locomotiv-Eisenbahnen. *See* **Schmitt**, Eduard.

——— Bedingnisse für Leistungen und Lieferungen im Eisenbahnwesen. *See* **Tilp**, Emil.

——— Chemins de fer français. *See* FRANCE. **Ministère** de l'agriculture, etc.

——— Depots and stations. Gesammt-Anordnung der Bahnhöfe und Stationen. *See* **Flattich**, Wilhelm.

——— Entwässerungs- und Bauarbeiten bei Eisenbahnbauten im Rutschterrain. *See* **Lorenz**, Alfred.

——— Statistische Nachrichten von den preussischen Eisenbahnen. *See* PRUSSIA. **Ministerium** für Handel, etc.

——— Tables for setting out curves on. *See* **Olver**, J. S.

Ramdohr, L. Gasfeuerung, oder die rationelle Construction industrieller Feuerungs-Anlagen, unter Berücksichtigung der Kalkbrennerei und der Thonwaaren-Industrie. 2 Bde. 8°. *Halle*, 1875–77.

Rand, Edward Sprague, *jr.* Flowers for the parlor and garden. *Illus.* 12°. *Boston*, 1863.

Rank (The) and talent of the time; a dictionary of contemporary biography, containing one thousand interesting and accurate memoirs of eminent living celebrities. 8°. *London*, 1861.

Raspail, F. V. Nouveau système de chimie organique, fondé sur des nouvelles méthodes d'observation. T. 1-3. 8°. *Paris*, 1838.

RATISBON. Kgl. bayer. botanische Gesellschaft in Regensburg. Flora, oder allgemeine botanische Zeitung. Hrsg. von. *See* **Flora.**

Rauch, John H. Intramural interments in populous cities, and their influence upon health and epidemics. 8°. *Chicago*, 1866.

Raumer, Karl v. Contributions to the history and improvement of the German universities; reprinted from the American journal of education. Ed. by Henry Barnard. 8°. *New York*, 1859.

Ray, J. Education in its relation to the physical health of the brain. A lecture before the R. I. institute of instruction, Oct. 8th, 1850. 24°. *Boston*, 1851.

Read, —. Orion. *See* **Tredgold, T. Steam navigation, Apps. E and F.**

Reader (The); a review of literature, science and art. v. 1–6, 1863–65. 4°. *London*, 1863–65.

REBELLION, Medical and surgical history of the war of the. *See* UNITED STATES. **War** dept. Surgeon-general's office.

RECEIPTS. Instructor for the old and young. *See* **Blanchard**, N. H.

——— Workshop, for use of manufacturers, mechanics, etc. *See* **Spon**, Ernest.

Reed, P. Fishe. The little corporal's drawing book; drawing lessons, etc. *Illus.* obl. 8°. *Chicago*, 1869.

Rees, R. Over der verdeeling van het magnetismus in magneten. 8°. *Amsterdam*, 1847.

Reference (A) catalogue of current literature, containing the full titles of books now in print and on sale, with the prices at which they may be obtained of all the booksellers, and an index to nearly 30,000 works; also, a list of the most familiar pen names. 8°. *London*, 1877.

REFINING gold by zinc. *See* **McCulloh**, R. S.

Regnault, —, **Morin**, —, and **Brix**, —. Rapport sur les comparaisons qui ont été faites à Paris, en 1859 et 1860, de plusieurs kilogrammes en platine et en laiton avec le kilogramme prototype en platine des archives impériales. 4°. *Berlin*, 1861.

Reichart, E. Beurtheilung des Trinkwassers und seine Brauchbarkeit für gewerbliche Zwecke. 8°. *Jena*, 1872.

Reiche, H. Die Dampfkessel der Wiener Ausstellung, 1873. *Illus.* 8°. *Leipzig*, 1874.

Reid, Henry. A practical treatise on the manufacture of Portland cement; to

Digitized by Google

Reid, Henry—Continued.
which is added a translation of M. A. Lipowitz's work, describing a new method adopted in Germany of manufacturing that cement, by W. F. Reid. *Illus.* 8°. *Philadelphia,* 1869.

Reid, W. F. Portland cement. *See* **Reid,** Henry.

Reilly's Pennsylvania state business directory, for 1868–69. 8°. *Philadelphia,* 1868.

Reinders, B. Mededeelingen over fabriek- en handwerknijverheid. 8°. *Zwolle,* 1865.

Remarks on medical galvanism and the apparatus employed for its administration. 16°. *London,* 1852.

——— on the art of wine making, with suggestions for the improvement of domestic wines. 2d ed. 12°. *London,* 1817.

RENNET. Memoria sul caglio vitellino. *See* **Nava,** D., and **Selma,** G. F.

Renwick, James. First principles of chemistry; being a familiar introduction to the study of that science. 18°. *New York,* 1846.

Report on the cholera in Paris; published by authority of the French government. Trans. from the original, and printed by recommendation of the board of health, New York. 8°. *New York,* 1849.

Restelli, F. Influenza delle associazioni industriali e commerciali sulla prosperità pubblica; e mezzi per tutelarle. 8°. *Milano,* 1845.

RETAINING walls, Surcharged. *See* **Tate,** James S. **Van Nostrand's science series, No. 7.**

REUTLINGEN. Pomologisches Institut. Württembergs Obstbau. *See* **Lucas,** Eduard.

Reynaud, Léonce. Mémoire sur l'éclairage et le balisage des côtes du France. Publié par ordre de son excellence M. Armand Béhic, ministre de l'agriculture, du commerce et des travaux publics. 4°. Atlas, fol. *Paris,* 1864.

Reynolds, John Russell. On diseases of the spine, etc. *See* **Radcliffe,** C. B., and others. **Medical news lectures, v. 4.**

RHODE ISLAND. Geological and agricultural survey. Report, 1839. By Charles T. Jackson. *Illus.* 8°. *Providence,* 1840.

Rice, Charles. New remedies.; ed. by. *See* **New.**

Rice, M. J., and **Johnson,** W. W. A new method of obtaining the differentials of functions, with especial reference to the Newtonian conception of rates or velocities. 12°. *New York,* 1875.

RICE culture. Influenza delle risaje sulla salute humana. *See* **Capsoni,** Giovanni.

Richards, J. The economy of workshop manipulation. A logical method of learning constructive mechanics; arranged with questions for the use of apprentice engineers and students. 12°. *London, New York,* 1876.

Richardson, Benjamin W. On alcohol; a course of six lectures delivered before the Society of arts. 12°. *London,* 1876.

Richardson, C. J. The Englishman's house, from a cottage to a mansion. A practical guide to members of building societies, and all interested in selecting or building a house. *Illus.* 8°. *London,* [1817].

Richardson, George. A book of ceilings, composed in the style of the antique grotesque; designed by. fol. *London,* 1776.

Richardson, H. D. Horses; their varieties, breeding and management in health and disease. *Illus.* 12°. *New York,* 1852.

Richardson, T. A. The art of architectural modelling in paper; with full instructions as to tools and materials, design and structure, etc. *Illus.* 8°. *London,* 1867. **Weale's series, No. 127.**

Richardson, T. G. Elements of human anatomy; general, descriptive and practical. 2d ed. *Illus.* 8°. *Philadelphia,* 1867.

Ricord, Philip. A treatise on the venereal disease; additions by. *See* **Hunter,** John.

Riddle, S. Every man his own physician; or the best mode of preserving health and curing disease: also, a number of the most valuable recipes ever publish d, etc. 8°. *Ashland, O.,* 1857. pp. 15.

Rigo y Sinobas, Manuel. Resúmen de los trabajos meteorológicos correspondientes al año 1854, verificados en el real observatorio de Madrid, bajo la direccion de. 4°. *Madrid,* 1857.

Rimbault, E. F. Musical instruments. **British manufacturing industries, v. 11.**

RIPARIAN constructions. Uferbau. *See* **Schwarz,** F.

Digitized by Google

Rizzi, Domenico. Istruzione per la coltivazione dei cereali e foraggi. 8°. *Venezia*, 1844.

ROAD and waterworks. Zeichnungen über Wasser- und Strassenbau. *See* CARLSRUHE. **Polytechnische** Schule.

ROADBED structures. Erdkunstbau auf Strassen und Eisenbahnen. *See* **Schmitt,** Eduard.

Robertson, Frank. Engineering notes. 8°. *London, New York*, 1873.

Robson, William. Grammigraphia; or the grammar of drawing: a system of appearance, which by easy rules, communicates its principles, and shews how it is to be presented by lines; distinguishing the real figure in nature from the appearance, or shewing the appearance of the reality, rendering visual observation more correct and interesting, and proposing the pleasure and universality of the science. *Illus.* 4°. *London*, 1799.

ROCK-drilling machines. Gesteinsbohrmaschinen. *See* **Stapff,** F. M.

ROCKFORD. Public library. Catalogue, together with the first annual report of the beard of directors, organized June 24, 1872. 8°. *Rockford, Ill.*, 1873.

ROCKY mountains, Trip to the. *See* **Seymour,** Silas.

Roebling, W. A. Pneumatic tower foundations of the East river suspension bridge. 8°. *New York*, 1872.

Roeper, Oscar. System einer beweglichen Brücke. *Illus.* 8°. *Hamburg*, 1868.

Rogers, Henry Darwin. Pennsylvania geological survey. *See* PENNSYLVANIA.

—— and **Johnston,** A. K. Atlas of the United States of North America, Canada, New Brunswick, Nova Scotia, Newfoundland, Mexico, Central America, Cuba, and Jamaica; on a uniform scale, from the most recent documents, etc.; with plans of the principal cities and sea-ports, and an introductory essay on the physical geography, etc., of North America. 4°. *London*, 1857.

Roguet, V. L'officier d'infanterie en campagne. 8°. *Paris*, 1846.

ROME. Accademia dei Lincei. Atti della reale accademia dei Lincei, 1876-77. 8°. *Roma*, 1877——.

Romen, Carl. Die Colorie der Baumwolle auf Garne und Gewebe mit besonderer Berücksichtigung der Türkischroth-Färberei, etc. *Illus.* 8°. *Wien*, 1878. **Chemisch-technische Bibliothek, B. 37.**

Romen, Carl—Continued.

ROOFING. Dachdeckerarbeiten. *See* **Musterzeichnungen.**

ROOFS, floors and walking surfaces. *See* **Hyatt,** Thaddeus.

Roosevelt, Robert B. Five acres too much. A truthful elucidation of the attractions of the country, and a careful consideration of the question of profit and loss as involved in amateur farming; with advice and instruction to those about purchasing large or small places in the rural districts. 12°. *New York*, 1869.

Roscoe, Henry E. Lessons in elementary chemistry; inorganic and organic. 16°. *London*, 1867.

Ross, Friedrich. Electrische Beleuchtung, deutsch bearb. von. *See* **Fontaine,** H.

ROTARY fans, Proportions of. *See* **Briggs,** Robert.

ROTATORIA. A sodro' allatkák. *See* **Bartsch,** Samuel.

Roth, H. Bad Weilbach und sein kaltes Schwefelwasser. 8°. *Wiesbaden*, 1855.

—— Die drei Stahlquellen zu Schwalbach nach ihrer Verschiedenheit und Wirksamkeit. 8°. *Wiesbaden, n. d.*

Rowell, George P., and Co.'s American newspaper directory, containing accurate lists of all the newspapers and periodicals in the United States, territories, the dominion of Canada and Newfoundland. 8°. *New York*, 1877.

Rudolphy, John. Pharmaceutical directory of all the crude drugs now in general use; their etymology and names in alphabetical order. 4 parts. Part 1. English, botanical, pharmaceutical, and German names. 2. Botanical, English, pharmaceutical, and German names. 3. Pharmaceutical, botanical, English, and German names. 4. German, pharmaceutical, botanical, and English names. roy. 8°. *New York*, 1866.

Rueff, *Dr.* Unterricht in der Hufbeschlagkunde und Nachträge aus den Vorlesungen an der landwirthschaftlichen Academie Hohenheim, 1867. *n. t. p.* [*Manuscript.*]

Digitized by Google

Rueff, *Dr.* Thier-Arzneischule zu Stuttgart, nach ihrem 50jährigen Bestehen. 8°. *Stuttgart*, 1871.

Ruhne, J. F. Lehrbuch der Kalk-, Cement-, Gyps- und Ziegelfabrikation. *Illus.* 8°. *Braunschweig*, 1877.

Ruppert, Carl. Neues System für Eisen-Brücken grosser Spannweiten durchgeführt, (*a.*) für eine Brücke über den Bosphorus; (*b.*) für eine Bahnbrücke über eine Schlucht. 8°. *Wien*, 1867.

Russell, Richard. A dissertation on the use of sea-water in the diseases of the glands; particularly the scurvy, jaundice, king's evil, leprosy, and glandular consumption. Translated from the Latin. To which is added a translation of Dr. Speed's commentary on sea-water; also, an account of mineral waters in Great Britain, and the foreign mineral waters of Pyrmont, Spa and Seltzer. 8°. *London*, 1769.

RUSSIA, Turkey and England; by R. Cobden. *See* **Cobden** club.

S., W. Historia mundi, or Mercator's atlas; englished by. *See* **Hondy,** Judocus.

Sabine, Edward. Observations at the observatory at Toronto; printed under superintendence of. *See* GREAT BRITAIN. **Magnetical** and meteorological observatory.

Sabine, Robert. Telegraphy. **British manufacturing industries, v. 10.**

Sachsse, Robert. Die Chemie und Physiologie der Farbstoffe, Kohlehydrate und Proteïnsubstanzen. Ein Lehrbuch für Chemiker und Botaniker. *Illus.* 8°. *Leipzig*, 1877.

SADDLERY. British manufacturing industries, v. 3.

SAFETY locks. Notice sur les travaux d'un serrurier mécanicien. *See* **Fichet,** M.

ST. IGNATIUS' bean, History and uses of. *See* **Daynall,** J. M.

St. John, John R. A true description of the Lake Superior country, etc.; with Bayfield's chart; also a minute account of the copper mines and working companies; and map of the mineral regions, etc.; containing a concise method of assaying, treating, smelting, and refining copper ores. 18°. *New York*, 1846.

ST. LOUIS. Public school library. Systematic index to the books, together with the charter, regulations and by-laws of the society, and the rules and regulations of the library and reading room. 8°. *St. Louis*, 1866.

SALT. British manufacturing industries, v. 12.

Salzmann, C. G. Gymnastics for youth. Trans. from the German. *Illus.* 12°. *Philadelphia*, 1802.

Sampson, Henry. A history of advertising from the earliest times; illustrated by anecdotes, curious specimens and biographical notes. *Illus.* 12°. *London*, 1874.

Sanderson, William. Graphice. Or, the use of the pen and the pensill, in designing, drawing, and painting; with exact discourse of each of them. As also, concerning miniature or limning, in water colours: the names, natures, and properties of colors; the ordering, preparing, washing and using them, and working with them: with rare receipts and observations, of the best masters of this art. 2 parts, with some cuts and prints, proper to each section. 8°. *London*, 1658.

SANSKRIT. Det oldnorske Verbum, oplyst ved Sammenligning med Sanskrit. *See* **Holmboe,** C. A.

SANTONINE. Kentniss des Santonin. Inauguraldissertation. *See* **Bernhardi,** Bruno.

Sars, Michael. Beskrivelse over Lophogaster Typicus. 4°. *Christiania*, 1862.

——— Fossile dyrelevninger fra quartaerperioden. *Illus.* 4°. *Christiania*, 1865.

Sassoon mechanics' institute. Rules and catalogue of the library. 8°. *Bombay*, 1874.

Sawyer, Henry E. Metric manual for schools; the decimal system of measures and weights, with exercises and problems. 18°. *Boston*, [1877].

SAXONY. Aichungscommission. Anfertigung eiserner Gewichtsstücke für das Königreich Sachsen. 4°. *Dresden, n. d.*

——— Ministerium des Innern. Statistisches Bureau. Zeitschrift. *See* **Engel,** Ernst.

SCALES. Bewegingen eener Balans. *See* **Stammkart,** F. J.

Schacht, Hermann. Bericht an das königliche Landes-Oekonomie-Collegium über die Kartoffelpflanze und deren Krankheiten. Nach Untersuchungen,

Digitized by Google

Schacht, Hermann—Continued.
welche im Auftrage des königlichen Ministerii für landwirthschaftliche Angelegenheiten im Jahre 1854 unternommen wurden. *Illus.* 4°. *Berlin*, 1856. pp. 30.

Schaltenbrand, Carl. Die Locomotiven. Sammlung ausgeführter Zeichnungen mit beschreibendem Text. *Illus.* 8°. *Berlin*, 1876.

Scharrath, W., and **Schröder,** H. Entwurf einer Mehl-, Stampf-, Oel- und Säge-Mühle mit Wasserrad und Dampfmaschine und Fruchtspeicher. *Illus.* 4°. *Halle*, 1871.

Scheffler, Adolph. Eine rationelle Form der Eisenbahnwagenachsen. Vorzüge der Gussstahlachsen. 8°. *Braunschweig*, 1861.

Schele de Vere, Maximilian. Outlines of comparative philology, with a sketch of the languages of Europe, arranged upon philologic principles; and a brief history of the art of writing. 12°. *New York*, 1853.

Scheppig, Ricardus. De Posidonio Apamensi rerum gentium terrarum scriptore. 12°. *Sondershausen*, 1869.

Schieferdecker, C. C. Nature, prevention and cure of cholera. 8°. *New York*, 1866. pp. 46.

SCHISTS. Schisti bituminosi di tignale sul lago di Garda. *See* **Curioni,** G.

Schliemann, Henry. Mycenæ; a narrative of researches and discoveries at Mycenæ and Tiryns. Preface, by W. E. Gladstone. Maps, plans and other illustrations, representing more than seven hundred types of the objects found in the royal sepulchres at Mycenæ and elsewhere in the excavations. roy. 8°. *New York*, 1878.

Schluter, Christoph. Gründlicher Unterricht von Hütte-Werken, nebst Probier-Buch. 4°. *Braunschweig*, 1738.

Schmidt, F. X. Chemie für Metallarbeiter, zum Gebrauche in der Werkstätte, für Unterricht an Gewerbeschulen und technischen Lehranstalten. 8°. *Stuttgart*, 1876.

Schmitt, Eduard. Erdkunstbau auf Strassen und Eisenbahnen. Theil 1. Futtermauern und Durchlässe. 2. Bohlwände. *Illus.* 8°. *Leipzig*, 1871.

——— Vorträge über Bahnhöfe und Hochbauten auf Locomotiv-Eisenbahnen.

Schmitt, Eduard—Continued.
Theil 1. Anlage der Bahnhöfe. 8°. *Leipzig*, 1873.

Schott, P. Gaspar. Organum mathematicum libris ix. explicatum à P. Gaspare Schotto; quo per paucas ac facillimè parabiles tabellas, intra cistulam ad modum organi pneumatici constructam reconditus, pleraeque mathematicae disciplinae, modo novo ac facili traduntur. sm. 4°. *Herbipoli*, 1668.

Schröter, M. Technologie der Wärme, aus dem Italienischen uebers. von. *See* **Ferrini,** Rinaldo.

Schübeler, F. C. Synopsis of the vegetable products of Norway. 8°. *Christiania*, 1862.

Schulz, C. G. Die Fabrikation des Zuckers aus Rüben. Theil 1. Die Scheidung. 2. Die Filtration. 3. Das Abdampfen und Berechnungen der Abdampf-Apparate. 4. Das Kochen im Vacuum. 5. Das Decken des Zuckers. 6. Der Rübenbau. 8°. *Berlin*, 1862–65.

Schuyler, A. The principles of logic, for high schools and colleges. 12°. *Cincinnati*, 1869.

Schwarz, F. Der Uferbau. *Illus.* 4°. *Berlin*, 1866.

SCIENCE. Atti della fondazione scientifica Cagnola. *See* MILAN.

——— Principles of, applied to the arts, etc. *See* **Potter,** Alonzo.

——— Le Valhalla des sciences pures et appliquées. *See* **Hugo,** Léopold.

SCIENTIFIC apparatus, Special loan collection of South Kensington museum. *See* SOUTH KENSINGTON.

Scientific (The) artisan; a journal of patents, science, art, discovery, inventions, etc. 2 v. [v. 2 is called The artisan, etc.] fol. *Cincinnati*, 1859.

——— instruments. Wissenschaftliche Instrumente. *See* Jolly, Listing, etc.

SCOTLAND, Highland and agricultural society of. Transactions. See **Highland.**

Scott, Genio C. Fishing in American waters. A new ed. Parts 6 and 7, or southern and miscellaneous fishes. *Illus.* 8°. *New York*, 1875.

Scott, Sinclair and co. Engines of the Dee and Solway packets. *See* **Tredgold,** T. **Steam navigation. App's E and F.**

Scott, William B. Half-hour lectures on the history and practice of the fine and

Digitized by Google

Scott, William B.—Continued.
ornamental arts. 3d. ed. rev. by the author. Illustrated by W. J. Linton, 12°. *New York*, 1875.

SCREWS, Wood. **British manufacturing industries, v. 3.**

SCROLL ornaments, Knight's. *See* **Knight's.**

SCULPTURE and decorative art, as applied to the new houses of parliament. *See* **Hunt,** F. Knight.

—— Peinture et sculpture. *See* **Testelin,** Henry.

SEA-water, A dissertation on the use of, in the diseases of the glands. *See* **Russel,** Richard.

SEALS, Origin and use of. *See* **Wadhams,** Albert.

Seeland, F. Hüttenberger Erzberg und seine nächste Umgebung. 8°. *Wien*, 1876.

Seiss, Joseph A. A miracle in stone; or the great pyramid of Egypt. 2d ed. 12°. *Philadelphia*, 1877.

SELTZER waters. Short essay on the curative properties of. *See* **Short.**

SEWERS, The Brooklyn water-works and. *See* BROOKLYN (N. Y.)

Seymour, Silas. Incidents of a trip through the great Platte valley, to the Rocky mountains and Laramie plains, in the fall of 1866; with a synoptical statement of the various Pacific railroads, and an account of the great Union Pacific railroad excursion to the one hundredth meridian. 12°. *New York*, 1867.

SHADES and shadows, General problems of. *See* **Warren,** S. E.

Shaw, Henry. The decorative arts, ecclesiastical and civil, of the middle ages. *Illus.* 4°. *London*, 1851.

—— Illuminated ornaments selected from the manuscripts and early printed books, from the sixth to the seventeenth centuries; drawn and engraved by, with descriptions by Sir Frederick Madden. *Illus.* 4°. *London*, 1833.

—— Specimens of ancient furniture; drawn from existing authorites; with descriptions drawn by Sir Samuel Rush Meyrick. 4°. *London*, 1866.

Sheet-metal (The) builder; an illustrated monthly journal, devoted to the use of sheet metal in architecture. 2 v. 4°. *Toledo, Ohio*, 1874–76.

SHIP-building. **British manufacturing industries, v. 10.**

SHOEMAKING. The shoemaker. *See* **Guide** to trade.

Short (A) essay on Seltzer waters; the curative properties of the natural spring. 12°. *Wiesbaden, n. d.*

Siddons, G. A. The cabinet-maker's guide; or rules and instructions in the art of varnishing, dyeing, staining, japanning, polishing, etc., wool, ivory, and metals. With appendix of tables. 5th ed. 24°. *London*, 1830.

Sieuve, M. Les moyens de garantir les olives de la piqueure des insectes, pour en extraire une huile abondante et plus fine, par l'invention d'un molin domestique, avec la manière de la garantir de toute rancissure. 8°. *Paris*, 1769.

SIGNBOARDS, History of. *See* **Larwood,** Jacob, and **Hotten,** J. C.

SILK. British manufacturing industries, v. 5.

SILKWORM. Rapporto per lo studio della malattia dei bachi da séta *See* **Carutti,** D.

Silliman, Benjamin, *jr.* First principles of physics or natural philosophy, designed for the use of schools and colleges. *Illus.* 12°. *Philadelphia*, 1859.

SILVERSMITHS, Knight's scroll ornaments, for the use of. *See* **Knight's.**

Simmonds, Peter Lund. Fibres and cordage. **British manufacturing industries, v. 9.**

Simms, C. E. Public works of Great Britain; consisting of railways, tunnels, arches, viaducts, bridges, locomotives, iron and gas works, canals, lock gates, London and Liverpool docks, etc. *Illus.* fol. *London*, 1838.

Simms, F. W. Observations on the asphaltic mastic, or cement of Seyssel. 8°. *London*, 1838.

Sims, T. Dyeing and bleaching. **British manufacturing industries, v. 6.**

Singer, Max. La teinture moderne. Procédés pratiques de teinture, d'impression et de blanchiment; fabrication des matières tinctoriales, recettes, échantillons; vocabulaire des termes techniques français, allemands et anglais. 8°. *Leipzig*, 1875.

SKIN, Diseases of the. *See* **Anderson,** McCall. **Medical news lectures, v. 5.**

Digitized by Google

Skinner, —. Skinner's best medical offering; or the people's friend in sickness and health; it being his best work, containing many valuable directions and receipts, etc. 18°. *Boston*, 1852. pp. 46.

SLAVE trade in Africa, in 1872. *See* **Berlioux**, Étienne Félix.

SLIDE rule. Mechanic's assistant; treatise on mensuration and the sliding rule. *See* **Knapen**, D. M.

Sloan, Samuel. Architectural review. *See* **Architectural.**

SMALL-arms. Geschichte der Handfeuerwaffen. *See* **Schön**, J.

—— wares and notions. Kurzwaaren-Industrie. Kanitz. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 2.**

SMELTING. Fortschritte des metallurgischen Hüttengewerbes in der neuern Zeit. *See* **Hartmann**, C. F. A.

Smith, C. Graham. Engineering papers; mortar, etc.; practical ironwork; retaining walls; with addenda. 8°. *London*, 1875.

Smith, Eustace. On the wasting diseases of infants and children. 8°. *Philadelphia*, 1870. **Medical news lectures, v. 3.**

Smith, J. Lawrence. Report on the minerals and mineral waters of Chile. 4°. *n. t. p.*

Smith, Ransom P. The cholera; its history, course and treatment. 8°. *Chicago*, 1866.

Smith, Shaler C. Comparative analysis of the Fink, Murphy, Bollman, and triangular trusses. 8°. *Baltimore*, 1863.

Smith, Thomas. The wonders of nature and art; a concise account of whatever is most curious and remarkable in the world. 24°. *London.*

Smoker (The), chewer and snufftaker's companion, and tobacconist's own book. 8°. *Philadelphia*, 1841. pp. 49.

Smyth, Warrington W. Metallic mining and collieries. **British manufacturing industries, v. 1.**

SOAP. British manufacturing industries, v. 4.

Solis, Virgil. Drinking-cups, vases, ewers, and ornaments, designed for the use of gold and silversmiths. *Illus.* 4°. *London*, 1862.

Sonden, C. U. The Asiatic cholera; its symptoms, development and treatment. 8°. *Cincinnati*, 1866.

Sonnenstern, Maximilian von. Report on the Nicaragua route for an interoceanic ship-canal, with a review of the proposed routes; made to the minister of public works of Nicaragua. Translated for the United States coast survey. 4°. *Washington*, 1874.

SOUTH KENSINGTON museum. Conferences held in connection with the special loan collection of scientific apparatus; 1876. Chemistry, biology, physical geography, geology, mineralogy, and meteorology. 8°. [*London*, 1877 ?]

Southern (The) cultivator; a monthly journal, devoted to the improvement of southern agriculture; designed to improve both the soil and the mind; to elevate the character of the tillers of the soil, and to introduce a more enlightened system of culture. v. 1–8. [v. 1, 2, semi-monthly, ed. by J. W. Jones; v. 3–5, ed. by James Camak; 5–8, by Daniel Lee.] *Illus. Augusta, Ga.*, 1843–50.

—— (The) quarterly review. New series. v. 1–11. 8°. *Charleston*, 1850–55.

Sowerby, James. A new elucidation of colours, original, prismatic and material, showing their concordance in those primitives, yellow, red and blue; and the means of producing, measuring and mixing them; with some observations of the accuracy of Sir Isaac Newton. 4°. *London*, 1809.

SPECIFIC weight. Beregning af et fast legemes specifike vaegt. *See* **Broch**, O. J.

SPIDERS. Magyarorszag Pók-Faunája. *See* **Herman**, Otto.

SPIKES, Railway. **British manufacturing industries, v. 3.**

SPINE, Diseases of the. *See* **Radcliffe**, C. B., and others. **Medical news lectures, v. 4.**

SPINNING, weaving, sewing. Geschichte vom Spinnen, Weben, Nähen. *See* **Grothe**, Hermann.

Spirk, Anton. Handbuch der gesammten Färberei und Druckerei. *Illus.* 8°. *Berlin*, 1869.

Spon, Ernest. Water supply. The present practice of sinking and boring wells; with geological considerations, and ex-

Digitized by Google

Spon, Ernest—Continued.
amples of wells executed. 18°. *London and New York*, 1875.

—— Workshop receipts for the use of manufactures, mechanics and scientific amateurs. 12°. *London*, 1873.

SPRINGS of Lower Selters. Die Mineralquelle zu Niederselters. *See* **Mineralquelle.**

—— of Schwalbach. Die drei Stahlquellen. *See* **Roth,** H.

STAIR-building. Gill's mechanical stair-builder. *See* **Gill,** J. R.

Stalsberg, Rik. F. Udsigt over de vaesentligste Forbedringer ved Ierntilvirkningen i de seneste Decennier. 8°. *Christiania*, 1866.

Stamkart, J. J. Over de Bewegingen eener Balans. 4°. *Amsterdam*, 1849.

Stannah's tables. Weights of angle and tee iron, in lbs. per lineal foot. 8°. *London*, 1867.

Stapff, F. M. Gesteinsbohrmaschinen. Mit Atlas. 8°. *Falun*, 1869.

STARCH. Die Stärkefabrikation. *See* **Stohmann,** F.

STATICS, The elements of graphical. *See* **Du Bois,** A. Jay.

Stationer (The) and fancy trades' register: a medium of trade communication and advertising circular for stationers and paper-makers, printers and bookbinders; music, toy, and pianoforte dealers and manufacturers, Berlin wool repositories and all persons interested in the fancy trades. v. 1–8, 1870–77. [Monthly.] 8°. *London*, 1870–77——.

STATIONERY. The American bookseller. *See* **American.**

—— The stationer and fancy trades' register. *See* **Stationer.**

STATISTICAL congress. Internationaler statistischer Congress in Berlin. *See* **Engel,** *Dr.*

STATISTICS of Belgium. Statistique de la Belgique. *See* BELGIUM. **Ministère** des finances.

—— of Belgium. Statistique de la Belgique. *See* BELGIUM. **Ministère** des travaux publics.

—— of Italy. Statistica del regno d'Italia. *See* ITALY. **Ministero** d'agricoltura, etc.

STATISTICS. Staatkundig Jaarboekje. *See* AMSTERDAM. **Vereeniging.**

STEAM and the steam-engine, land, marine, and locomotive. **Putnam's science series, 22 a.**

—— boilers. Dampfkessel der Wiener Ausstellung, 1873. *See* **Reiche,** H.

—— engine indicator, Richard's, and the development and application of force in the steam engine. *See* **Porter,** C. T.

—— engineering, A new treatise on. *See* **Nystrom,** John W.

STEAMBOAT directory, Lloyd's, and disasters on the western waters. *See* **Lloyd,** J. T.

STEEL. British manufacturing industries, v. 1.

—— Journal of the iron and steel institute. *See* **Journal.**

—— Prehistoric use of iron and. *See* **Day,** St. John V.

Stegmann, H. Die Torfgasfeuerung als Mittel zur rationellen Verwerthung des Torfes in der Industrie. Mit einem Holzschnitt. sm. 8°. *Braunschweig*, 1877. pp. 33.

STENOGRAPHY, Phonographic. *See* **Harmon,** E.

STEREOSCOPE, considered in relation to binocular vision. *See* **Mansfield,** C. Inglesby.

—— Stéréoscope et pseudoscope. *See* **Moigno,** M.

Sterret, James. The patent horse-breaker, and economical farrier. 16°. *Harrisonburg, Va.*, 1854. pp. 48 + 16.

Stewart, Robert. The pocket farrier and farmer's receipt-book. 12°. *Nashville*, 1855. pp. 32.

STOCK-breeding. Vee-Stapel. *See* **Jennes,** J.

—— market of Boston; its fluctuations for twenty years. *See* **Martin,** J. G.

Stohmann, F. Die Stärkefabrikation. *Illus.* 8°. *Berlin*, 1878.

Stokes, William. Lectures on fever: delivered in the theatre of the Meath hospital and the County of Dublin infirmary. Ed. by John W. Moore. 8°. *Philadelphia*, 1876. **Medical news lectures, v. 7.**

STOMACH, Diseases of the. *See* **Fox,** Wilson. **Medical news lectures, v. 6.**

STONE, artificial, Report on. By L. J. Hinton. *See* UNITED STATES. **State dept. Reports Vienna exhib. 1873, v. 4.**

Digitized by Google

STONE cutting, Problems in. *See* **Warren**, S. Edward.

——— in bridge building. Eisen, Holz und Stein im Brückenbau. *See* **Eisen.**

Stoppelaar, J. H. Het papier in de Nederlanden gedurende de middeleeuwen. 8°. *Middelburg*, 1869.

Storer, Frank H. A manual of inorganic chemistry. *See* **Elliot**, C. W., and **Storer**, F. H.

Story, William W. The proportions of the human figure, according to a new canon for practical use; with a critical notice of the canon of Polycletus and of the principal ancient and modern systems. *Illus.* 8°. *London*, 1866.

Story (The) of a stomach; an egotism. By a reformed dyspeptic. 12°. *New York*, 1867.

Strachan, R. Principles of weather forecasts and storm prevision. 2d ed. 8°. *London*, 1868. pp. 24.

Strecker, Adolph. Das chemische Laboratorium der Universität Christiania; hrsg. v. *See* CHRISTIANIA. **Norske** Universität.

STRENGTH of materials. Lehre von der Elasticitaet und Festigkeit. *See* **Winkler**, E.

Strutt, Joseph. A complete view of the dress and habits of the people of England, from the establishment of the Saxons in Britain to the present time, illustrated by engravings taken from the most authentic remains of antiquity. To which is prefaced an introduction containing a general description of the ancient habits in use among mankind, from the earliest period of time, to the conclusion of the seventh century. 2 v. 4°. *London*, 1796.

Stuart, Bernard. How to become a successful engineer; hints to youths intending to adopt the profession. 18°. *Edinburgh*, 1866.

Stuart, James Montgomery. History of free trade in Tuscany. *See* **Cobden** club.

Stukey, Daniel. Typhus fever in the hog, or hog cholera, so called. Being a treatise on the cause, nature and treatment of the disease. 18°. *Columbus, Ohio*, 1878.

Sturgeon, William. Familiar instructions in the art of electro-gilding and silvering; also, instructions in the formation and theory of Voltaic batteries. 16°. *London*, 1842. pp. 47.

Sturgeon, William. Researches in electro-magnetism and galvanism, with remarks on electricity of the atmosphere. 8°. *London*, 1830.

SUBSOILING. Untergrundsdüngung und Düngepflug. *See* **Funke**, Walter.

SUGAR, Art of manufacturing and refining. *See* **Leon**, J. A.

——— Beet root. *See* **Grant**, E. B.

——— cane. Caña de azúcar. *See* **Dumont**, A. B. C.

——— industry. Rohmaterialien, Producte und Hülfssubstanzen der Zucker-Industrie. *See* **Frühling**, R., and **Schulz**, J.

——— manufacture. Cuiseur du sucre. *See* **Léluy**, C.

——— ——— Fabrikation des Zuckers aus Rüben. *See* **Schulz**, C. G.

——— refining. **British manufacturing industries, v. 12.**

——— Le sucre dans ses rapports avec la science, etc. *See* **Dubrunfaut**, M.

SUN-spots. Über die Sonnenflecken. *See* **Wolf**, Rudolf.

Surface (The) gold miners' manual. By an experienced gold miner. 8°. *Philadelphia*, 1849. pp. 16.

SURGERY; bandaging. Chirurgische Verbande. *See* **Troschel**, M.

——— Catalogue of the surgical section of the army medical museum. *See* UNITED STATES. **War** department.

——— A general system of. *See* **Heister**, Laurence.

——— Medical and physical researches in. *See* **Harlan**, R.

——— Practical treatise on fractures and dislocations. *See* **Hamilton**, F. H.

SURGICAL instruments. Précis descriptif sur les instrumens de chirurgie anciens et modernes, etc. *See* **Henry.**

SURVEYING, Elements of trigonometry, with applications to. *See* **Loomis**, Elias.

SUSPENSION bridges, The Clifton and other remarkable. *See* **Wright**, Lewis.

Sutherland, J. W. The science of horsemanship. 16°. *Harvard, Ill.*, 1867.

Sutton, T. Printing positive photographs. 2d ed. *London*, 1855.

Svedelius, G. Handbook of charcoal burners. Trans. from the Swedish of R. B. Anderson. Ed. with notes, by W. J. L. Nicodemus. *Illus.* 12°. *New York*, 1875.

Digitized by Google

Swank, James M. The department of agriculture; its history and objects. 12°. *Washington*, 1872.

SYPHILIS. Syphilisationen, studeret ved Sygesengen. *See* **Boeck,** Wilhelm.

TABLES, Wages computing. *See* **Hayes,** Lester.

Taffe, A., and **Boileau,** P. Applications de la mécanique au machines. 8°. *Paris*, 1872.

TAILORING. Das Schulter-Mass-System zum Zuschneiden für Herren-Kleider. *See* **Weber,** J. W. J.

——— The tailor. *See* **Guide** to trade.

Tanner, H. S. A new universal atlas, containing maps of the world and each of the United States, forming a series of one hundred and seventeen maps, plans and sections. fol. *Philadelphia*, 1844.

Taplin, William. The gentleman's stable directory, or modern system of farriery, etc. 13th ed. 8°. *London*, 1796.

Tappan, Henry P. Elements of logic, together with an introductory view of philosophy in general, and a preliminary view of the reason. 12°. *New York*, 1856.

TASMANIA. Royal observatory. Results of meteorological observations for twenty years; from 1840–1860, for Hobart Town; made at the royal observatory. 4°. *Tasmania*, 1861.

Tatham, Charles Heathcote. Designs for ornamental plate; many of which have been executed in silver from original drawings. fol. *London*, 1806.

——— Etchings representing the best examples of ancient ornamental architecture: drawn from the originals in Rome, and other parts of Italy, 1794–96. fol. *London*, 1799.

——— Etchings representing the best examples of Grecian and Roman architectural ornament; drawn from the originals, and chiefly collected in Italy. fol. *London*, 1843.

TAUNTON (Mass.) Public library. Catalogue of the library; with a classified index, revised rules and regulations, etc. Established 1866. sm. 4°. *Taunton*, 1878.

TECHNICAL dictionary. Technisches Wörterbuch. *See* **Karmarsch** and **Heeren.**

——— literature. Repertorium der technischen Literatur. *See* **Kerl,** Bruno.

TECHNOLOGY. Dizionario tecnologico. *See* **Brey,** Gaetano.

——— Geschichte der technischen Künste. *See* **Bucher,** Bruno.

——— of mechanics. Lehrbuch der mechanischen Technologie. *See* **Hoyer,** E.

TEETHING. Zahnarbeit der Kinder. *See* **Blumenthal,** C. A.

TELEGRAPH, electric, Electricity and. *See* **Wilson,** George.

——— ——— Reply to Mr. Cooke's pamphlet. *See* **Wheatstone,** C.

——— ——— Reply to Mr. Wheatstone's answer. *See* **Cooke,** W. F.

——— ——— Was it invented by Prof. Wheatstone? *See* **Cooke,** W. F.

TELEGRAPHY. Conférence télégraphique de Vienne. *See* VIENNA. **Conférence.**

——— Ligne de télégraphe de Mossoul à Häiderabad, etc. *See* **Vérard de Sainte-Anne.**

——— Télégraphe des locomotives. *See* **Bonelli,** G.

——— Telegraphen-Technik. *See* **Grawinkel,** C.

TELEPHONE (The). Lecture by A. Graham Bell. *See* LONDON. Society of telegraph engineers.

——— A speaking. *See* **Dolbear,** A. E.

——— The speaking. *See* **Prescott,** G. B.

TEMPERATURE of the sea, near Africa. *See* **Cornelissen,** J. E.

TENNESSEE. Geological survey. First biennial report, 1855. 8°. *Nashville*, 1856.

TERRA-cottas, in the British museum. *See* **Combe,** Taylor.

TERRITORIES, north-western, Descriptive journal of the. *See* **Fry,** F.

Testelin, Henry. Sentimens des plus habiles peintres sur la pratique de la peinture et sculpture, mis en tables de préceptes, avec plusieurs discours académiques, ou conférences tenues en l'Académie royale des dits arts, etc. l. fol. *Paris*, 1696.

TESTING, Commercial. Untersuchungen. Prüfung aller Handelswaaren etc. *See* **Hager,** Hermann.

TEXTILES. British manufacturing industries, v. 13.

Theilkuhl, M. Methintrisulfonsäure. Das Anfangsglied einer neuen Säurereihe.

Digitized by Google

Theilkuhl, M.—Continued.
Inaugural-Dissertation zu Leipzig. 12°. *Braunschweig,* 1868.

Thermometrical navigation through the Gulph stream, and from deep water into soundings. 8°. *Philadelphia,* 1799.

THERMOMETER and barometer. Résumé des observations thermométriques et barométriques. *See* **Plantamour, E.**

Thomas, M. Moniteur des eaux et forêts. 8°. *Paris,* 1842–44.

Thompson, M. An analytical digest of the District of Columbia, containing all the laws of Maryland of force and applicable in the District of Columbia and the acts of Congress in relation to the District, to March 3d, 1863; accompanied with brief statements of common law, and judicial decisions. 8°. *Washington,* 1863.

Thompson, Thomas. An attempt to establish the first principles of chemistry, by experiment. 2 v. 8°. *London,* 1825.

Thomson, J. A history and handbook of photography; ed. by. *See* **Tissandier,** Gaston.

Thucydides. Account of the plague at Athens. *See* **Clifton,** Francis.

Thurston, R. H. Efficiency of furnaces burning wet fuel, as determined by experiments on a large scale. [Paper read before American society of civil engineers, Oct. 21, 1874.] 8°. 1874. *n. t. p.*

——— Traction engines and steam road-rollers; or, steam on the common road. 8°. *Hoboken,* 1873.

Ticknor, Almon. The Columbian calculator; being a practical and concise system of decimal arithmetic. 12°. *Pottsville,* 1848.

TIDES. Tidal researches. *See* **Ferrel,** William.

Tiffany, Osmond. The Canton Chinese, or the American's sojourn in the celestial empire. 12°. *Boston,* 1849.

Tilp, Emil. Bedingnisse für Leistungen und Lieferungen im Eisenbahnwesen. 8°. *Wien,* 1875.

TIN plate. **British manufacturing industries, v. 1.**

Tissandier, Gaston. A history and handbook of photography. Transl. from the French. Ed. by J. Thomson. *Illus.* 8°. *London,* 1876.

TOBACCO. British manufacturing industries, v. 9.

——— smokers', chewers' and snuff takers' companion. *See* **Smoker's.**

Tobler, J. Die Uetlibergbahn mit Steigungen bis auf 70 per Mille und Bergbahn-Locomotiven mit einfacher Adhäsion. 8°. *Zürich,* 1876.

TOLUCHINONE. Ueber Toluchinone. *See* **Borgmann,** Eugen.

TOMBSTONES. Grabsteine. *See* **Musterzeichnungen.**

TOOL machines. Werkzeug-Maschinen zur Metall- und Holzbearbeitung. *See* **Hesse,** Ernst.

TOPOGRAPHY, Manual of. *See* **Enthoffer,** J.

Torrey, John. Outlines of the lectures on chemistry; delivered in the college of physicians and surgeons of the university of the state of New York. 2d ed. 16°. *New York,* 1829.

Totten, J. G. Essays on mortars; transl. by. *See* **Treussart,** —, **Petot,** —, and **Courtois,** —.

Townsend, Charles. Mechanical zodiac, designed to illustrate the motion of the earth in its daily and annual revolutions, and the apparent movements of the sun amongst the constellations of the zodiac, and other heavenly bodies. 4°. *New York,* 1852. pp. 2.

Toynbee, Joseph. On the use of an artificial membrana tympani, in cases of deafness, dependent upon perforation, or destruction of the natural organ. 2d ed. 8°. *London,* 1854. pp. 32.

TOYS. British manufacturing industries, v. 8.

TRACTION engines and steam road-rollers. *See* **Thurston,** R. H.

TRADE and commerce. Handels- und Gewerbekammer zu Leipzig. *See* **LEIPSIC.**

——— and commerce. Hannoversches Wochenblatt für Handel und Gewerbe. *See* **HANOVER. Gewerbe-Verein.**

——— Proceedings of the national board of trade. *See* **National.**

TRADES and technics. *See* **Musterzeichnungen.**

——— Guide to trade. *See* **Guide.**

TRAINING, Physical and vocal. *See* **Monroe,** L. B.

Digitized by Google

Tramp, Tim. [*pseud.*] War life; illustrated by stories of the camp and field. Compiled by. 12°. *New York*, 1862.

TRAMWAYS. British manufacturing industries, v. 10.

——— Their construction and working. *See* **Dowson,** J. E. and Alfred.

TRANSACTIONS. Atti della reale accademia dei Lincei. *See* ROME. **Accademia** dei Lincei.

——— Landwirthschaftliches Correspondenzblatt. *See* BADEN.

——— of the American society of civil engineers. *See* **American.**

——— Proceedings of the Royal physical society of Edinburgh. *See* EDINBURGH.

TRAVELS through North and South Carolina, Georgia, Florida, Cherokee country, etc. *See* **Bartram,** William.

TREATY with England. Traité de commerce avec l'Angleterre. Industries textiles et métallurgiques. *See* FRANCE. **Conseil** supérieur.

Treussart, —, **Petot,** —, and **Courtois,** —. Essays on hydraulic and common mortars, and on lime burning. Transl. from the French of. With brief observations on common mortars, hydraulic mortars and concretes, and an account of some experiments made therewith, at Fort Adams, Newport harbor, R. I., from 1825–38. By J. G. Totten. 8°. *Philadelphia*, 1838.

TRIGONOMETRY, Elements of plane and spherical. *See* **Loomis,** Elias.

——— Tables trigonométriques décimales. *See* **Delambre,** J. B. J.

Troschel, M. Unterricht im chirurgischen Verbande. *Illus.* 8°. *Berlin*, 1847.

TROWEL bayonet, Experiments with Rice's. *See* UNITED STATES. **War** department.

TRUSSES, Comparative analysis of. *See* **Smith,** S. C.

——— Graphical method for the analysis of bridge. *See* **Green,** C. E.

TUNNELLING. Tunnelbau. Neues System. *See* **Könyves-Tóth,** Michael.

TUNNELS, Sea. Unterseeischer Tunnel zwischen England und Frankreich. 8°. *Leipzig*, 1875.

TURBINES. Record of tests, at Lowell, etc. *See* **Emerson,** J.

TURKEY, Russia, and England. By R. Cobden. *See* **Cobden** club.

Turrschmiedt, Alb. Notizblatt des deutschen Vereins für Fabrication von Ziegeln, Thonwaaren, Kalk und Cement. 1865–67. 8°. *Berlin*, 1865–67.

TUSCANY, History of free trade in. *See* **Cobden** club.

Tyng, C. D. The stranger in the tropics; being a handbook for Havana, and guide book for travellers in Cuba, Puerto Rico, and St. Thomas. 12°. *New York*, 1868.

Uitvinding der Boekdrukkunst. 8°. *Harlem*, 1854.

Ulrici, Emil. Die Indianer Nord-Amerikas. Eine ethnographische Skizze. 12°. *Dresden*, 1867.

UMBILICAL cord, at childbirth, Ligation and management of. *See* **King,** A. F. A.

UNION Pacific railroad, and branches, etc., Report on. *See* UNITED STATES. **Interior** department.

——— ——— ——— Proposed change of route. *See* UNITED STATES. **Interior** department.

UNITED STATES business directory, Zell's, 1875. *See* **Zell's.**

——— Congress. Library. Report of the librarian, for 1867–69; 1872–74; 1876–77. 8°. *Washington*, 1867–78.

——— ——— [National foundry. Report of William Cost Johnson, from the committee appointed to inquire into the propriety of establishing a national foundry, for the purpose of fabricating ordnance of various kinds.] Reports Nos. 168, 229. 2 v. 8°. 1839, 1843. *n. t. p.*

——— Department of the interior. Annual register, Jan. 1, 1877. 8°. *Washington*, 1877.

——— ——— Bureau of education. Contributions to the history of medical education and medical institutions in the United States of America, 1776–1876. Special report, prepared for the bureau of education. 8°. *Washington*, 1877.

——— ——— Patent office. An alphabetical list of all patents and patentees on record in the patent office. [To 1827; supplement, 1828–30. 8°. *Washington*, 1830?] *n. t. p.*

——— ——— ——— Catalogue of the library of the patent office in 1847. 8°. *Washington*, 1847. pp. 34.

Digitized by Google

UNITED STATES. Department of the interior. Patent Office. Rules of practice in the United States patent office, 1853, '54, '55, '59, '61, '62, '65, '66, '67, '69, '71, '73, '77. 8°. [*Washington.*] *n. d.* [Imperfect set of Patent office rules, bound in 1 v. The first, issued 1853, is called 'Guide to the practice of the patent office'; following ones, to 1869, 'Rules and directions for proceedings in the patent office'.]

——— ——— Report of James H. Simpson, corps of engineers, on the change of route proposed by the Union Pacific railroad company; made to the secretary of the interior, Sept. 18, 1865; with the president's decision thereon. 8°. *Washington*, 1855.

——— ——— Report of James H. Simpson, corps of engineers, on the Union Pacific railroad and branches, Central Pacific railroad, wagon roads in the territories of Idaho, Montana, Dakota, and Nebraska, and the Washington aqueduct. Made to the secretary of the interior, Nov. 23, 1865. 8°. *Washington*, 1865.

——— Department of the navy. Bureau of ordnance. The iron-clad ships of the world. By M. P. Dislère; translated by R. W. Meade. 4°. *Washington*, 1875. pp. 29.

——— Department of state. French universal exposition, for 1867. Official correspondence on the subject, published for the information of citizens of the United States; containing general regulations, classification of articles, etc. 4°. *Washington*, 1868.

——— ——— Letter from the secretary, transmitting a list of all patents granted by the United States; the acts of congress relating thereto, and the decisions of courts of the United States, under the same. 2 v. 8°. *Washington*, 1831.

——— Department of the treasury. Annual report of the supervising architect, to the secretary, 1872–74. 8°. *Washington*, 1872–74.

——— ——— Bureau of statistics. Quarterly reports of the chief of the bureau; showing the imports and exports of the United States, for the four quarters of the fiscal year ended June 30, 1877. 8°. *Washington*, 1878.

——— ——— Library. Catalogue. July 1, 1873. 8°. *Washington*, 1873.

——— ——— Marine hospital. The adoption of the metric system of weights and measures by the United States marine hospital service for purveying medicines, and for other official medical purposes; together with rules for converting terms of the United States apothecaries' weights and measures into their respective equivalents in terms of the metric system; suggestions for writing metric medical prescriptions, etc. 24°. *Washington*, 1878. pp. 40.

UNITED STATES. Dept. of treasury—Cont'd.

——— ——— Report of a geological survey of Wisconsin, Iowa and Minnesota; and incidentally, of a portion of Nebraska territory; made under instructions from the department, by David Dale Owen, United States geologist. 4°. *Philadelphia*, 1852.

——— Department of war. Army meteorological register, for twelve years, from 1843–1854, inclusive; compiled from observations made by the officers of the medical department of the army, at the military posts of the United States. Prepared under the direction of Thomas Lawson. Published by authority of Jefferson Davis, secretary. 4°. *Washington*, 1855.

——— ——— Bureau of engineers. Annual report of the chief of engineers to the secretary. 7 parts, 1875–77. 8°. *Washington*, 1875–77——.

——— ——— ——— Report of a reconnaissance from Carroll, Montana territory, on the upper Missouri, to the Yellowstone national park, and return, made in the summer of 1875; by William Ludlow. 4°. *Washington*, 1876.

——— ——— ——— Report of a reconnaissance of the Black Hills of Dakota, made in the summer of 1874; by William Ludlow. 4°. *Washington*, 1875.

——— ——— Directions for fitting infantry equipments, United States army. Watervliet arsenal, West Troy, N. Y. 8°. *Springfield, Mass.*, 1872.

——— ——— Reports of experiments with Rice's trowel bayonet, made by officers of the army, pursuant to instructions from the department. 8°. *Springfield, Mass.*, 1874.

——— ——— Surgeon general's office. Catalogue of the army medical museum. 8°. *Washington*, 1863.

Digitized by Google

UNITED STATES. Department of war. Surgeon general's office. Catalogue of the surgical section of the United States army medical museum. Prepared under the direction of the surgeon general. 4°. *Washington*, 1866.

——— Fevers of. *See* **Bartlett**, Elisha.

——— Newspapers of. American newspaper directory. *See* **Rowell**, G. P.

——— Railroads of. *See* **Poor**, Henry V.

UNIVERSITIES. Arkansas industrial university. 1st report. *See* ARKANSAS.

——— History and improvement of the German. *See* **Raumer**, Karl v.

USEFUL tables. *See* **Noble**, W. H.

Ure, Andrew. A dictionary of chemistry and mineralogy, with their applications. 4th ed., with improvements. 8°. *London, etc.*, 1835.

VALENTIA, Determination of the longitude of. *See* **Airy**, G. B.

Van Geuns, W. A. J. Proeve eener geschiedenis van de Aequivalentgetallen der scheikundige grondstoffen, en van hare soortelijke gewigten in gasvorm, voornamelijk in betrekking tot de vier grondstoffen der bewerktuig de Natuur. 8°. *Amsterdam*, 1853.

Van Ness, W. W. The national school for the soldier, or military tactics in question and answer. 12°. *New York*, 1866.

Vaticano. [A collection of printed pictures, representing biblical scenes from the Old and New Testaments; with explanatory text in Latin.] *n. t. p.*

Velpeau, Alf. A. L. M. A complete treatise on midwifery, or the theory and practice of tokology; including the diseases of pregnancy and puerperal state. Trans. from the French, by Charles D. Meigs. 4th ed. by William Byrd Page. 8°. *Philadelphia*, 1852.

Venable, Charles S. An elementary algebra. 12°. *New York*, 1869.

VENEREAL disease, Treatise on. *See* **Hunter**, John.

VENTILATION of the hall of representatives, Report on. *See* **Briggs**, Robert.

Vérard de Sainte-Anne, —. Ligne de télégraphe; Europe, Asie, Afrique, Océanie, Amérique. Sections: De Mossoul à Häidérabad, de Calcutta à Bangkok et Singapour. Mémoire présenté à l'Académie française. 8°. *Paris*, 1860.

Verband deutscher Architekten- und Ingenieur-Vereine. Denkschriften. 1. Ueber die Ausbildung der Baubeamten für den Verwaltungsdienst. 2. Über die Ausbildung der Bauhandwerker. 3. Über die Erforschung und Erhaltung der Baudenkmale des deutschen Reiches. 4. Über die Vergebung von Bauarbeiten und Bauakkorde. 12°. *Berlin, n. d.* pp. 7 + 21 + 28 + 20.

Verslag van den landbouw in Nederland over 1852–53. [2 v.] 8°. *Te 's Gravenhage*, 1854–55.

VETERINARY art. Thier-Arzneischule zu Stuttgart. *See* **Rueff.**

——— ——— The modern horse doctor. *See* **Dadd**, George H.

——— science. *See* **Carver**, J.

VIENNA conference. Documents de la conférence télégraphique internationale de Vienne. 4°. *Vienne*, 1868.

——— Congress. Landwirthschaftlicher Congress, 1849, zu Wien. 8°. *Wien*, 1849.

VINE culture. Culture de la vigne. *See* **Carrière**, E. A.

——— ——— Der Weinbau. *See* **Wiedersheim**, A.

Viollet-le-Duc, Eugène Emmanuel. Discourses on architecture. Trans., with an introductory essay by Henry Van Brunt. *Illus.* 8°. *Boston*, 1875.

VOCAL training, Manual of physical and. *See* **Monroe**, L. B.

Vogdes, William. An elementary treatise on mensuration and practical geometry; together with numerous problems of practical importance in mechanics. 12°. *Philadelphia*, 1846.

Vollrath, A. Kenntniss des Xylols. Inaugural-Dissertation an der Universität Göttingen. 12°. *Göttingen*, 1866.

VOLTAIC batteries, Formation and theory of. *See* **Sturgeon**, W. Familiar instructions.

VOYAGES. Two years in the Pacific and Arctic oceans. *See* **Munger**, James F.

Wadhams, Albert. An essay upon the origin and use of seals; also introducing a design for an improved seal of the United States. 8°. *Albany*, 1865. pp. 40.

WAGES, Tables for computing. *See* **Hayes**, Lester.

Walford, Cornelius. The insurance guide and hand-book on fire, life, marine, tontine, and casualty insurance. Amer. ed.;

Digitized by Google

Walford, Cornelius—Continued.
with additions adapting it to American use. 8°. *New York*, 1868.

Walker, J. A rhyming, spelling, and pronouncing dictionary of the English language, etc.; introduction to the various uses of the work, and index of allowable rhymes, with authorities for their usage from our best poets. New and rev. ed. 12°. *New York, n. d.*

Wallis, George. Jewellery. **British manufacturing industries, v. 11.**

Wanklyn, J. Alfred. Milk-analysis. A practical treatise on the examination of milk and its derivatives; cream, butter and cheese. 12°. *New York*, 1874.

WAR-life. *See* **Tramp,** Tim.

Warren, S. Edward. General problems of shades and shadows, etc. 8°. *New York*, 1867.

—— Problems in stone cutting, in four classes. 1. Plain-sided structures. 2. Structures containing developable surfaces. 3. Structures containing warped surfaces. 4. Structures containing double-curved surfaces. 8°. *New York*, 1875.

WASTING diseases of infants and children. *See* **Smith,** Eustace. **Medical news lectures, v. 3.**

WATCHES. British manufacturing industries, v. 11.

WATER, Drinking. Beurtheilung des Trinkwassers. *See* **Reichardt,** E.

—— supply and sewage. Wasserversorgung, Canalisation und Abfuhr. *See* MUNICH. **Commission.**

—— wheels. Records of tests. *See* **Emerson,** James.

—— —— Wasserräder und Göpel. *See* **Musterzeichnungen.**

—— works and sewers, The Brooklyn. *See* BROOKLYN (N. Y.)

—— —— New and rare inventions of. *See* **Caus,** Isaak de.

—— —— Das Wasser-Werk der freien Hansestadt Bremen. *See* BREMEN.

Waterproof cloths and wearing apparel. 8°. *London*, 1801.

WATERTOWN. Free public library. Catalogue, 1870. 8°. *Boston*, 1870.

Watson, J. W. Present state and prospects of electrical illumination. 8°. *London*, 1853.

Watts, Elizabeth. Flowers and the flower garden; with instructions on the culture of ornamental trees, shrubs, etc. 18°. *London*, 1867.

Watts, Henry. A dictionary of chemistry and the allied branches of other sciences; founded on that of the late Dr. Ure; assisted by eminent contributors. v. 1–5. With 1st and 2d supplements. 8°. *London*, 1863–75.

—— Fownes' manual of chemistry; ed. by. *See* **Fownes,** George.

Watts, Isaac. Cotton. **British manufacturing industries, v. 5.**

WEIGHTS and measures. Adoption of the metric system by the United States marine hospital service. *See* UNITED STATES. **Treasury dept. Marine hospital.**

—— —— —— Anfertigung eiserner Gewichtstücke für das Königreich Sachsen. *See* SAXONY. **Aichungscommission.**

—— —— —— Kilogrammes en platine et en laiton comparés avec le kilogramme prototype. *See* **Regnault,** —, **Morin,** —, and **Brix,** —.

Weiss, Julius. Die Galvanoplastik oder sichere Anleitung und ausführliche Darstellung des galvanoplastischen Verfahrens in all' seinen Theilen. Bearb. von. *Illus.* 8°. *Wien, Pest, Leipzig*, 1878. **Chemisch-technische Bibliothek, B. 38.**

Weiss, T. Darstellung künstlicher Mineralwässer. 8°. *Friedrichshafen*, 1871.

Weldekind, Ludwig. Studien im binären Werthgebiet. 8°. *Carlsruhe*, 1876.

Wells, D. A. Speech on protection in the United States. *See* **Cobden** club.

WEST, The, its soil, etc. *See* **Hall,** James.

WEST INDIES. The stranger in the tropics. *See* **Tyng,** C. D.

WHEAT, for twenty years in succession, grown on the same land. *See* **Lowes,** J. B., and **Gilbert,** J. H.

Wheeler, John H. Historical sketches of North Carolina, from 1584–1851. [2 v. in 1.] 8°. *Philadelphia*, 1851.

Whittaker, William J. A progressive course of inventive drawing on the principles of Pestalozzi, etc. First course. *Illus.* 12°. *Boston*, 1851.

Wilhelm, Franz. Drogen und Chemikalien. *See* PHILADELPHIA, etc. **Bericht Oesterr. Comm. Weltausst. 1876, Heft 9.**

Digitized by Google

WINE. Du vin; ses propriétés, sa préparation, ses maladies, ses falsifications, etc. *See* **Husson**, C.

—— making. Memoria sulla vinificazione. *See* **Dini**, F.

WISCONSIN, Geological survey of. *See* **Owen**, David Dale.

WORCESTER moulding works. Picture frames, mouldings and cornices. ob. 4°. [*Worcester*, 1878.]

WORKSHOP manipulation, Economy of. *See* **Richards**, J.

WRITING. The writing-reader. *See* **Gilbert**, T., and **Prass**, F.

XYLOLE. Kenntniss des Xylols. *See* **Vollrath**, A.

Zetzsche, K. E. Handbuch der elektrischen Telegraphie. 8°. *Berlin*, 1876–77.

ZOOLOGY. Medical and physical researches, etc. *See* **Harlan**, R.

ZURICH. Polytechnische Schule. Programm der eidgen.-polytechnischen Schule. Schuljahr, 1856–75. 4°. *Zürich*, 1856–75.

ZUYDER-ZEE. Droogmaking van het zuidelijk gedeelte der Zuiderzee. *See* AMSTERDAM. Maatschappij.

ZWOLLE. Kanalisatie-Maatschappij. De overrijsselsche Kanalen en hetgeen hunne Daarstelling is voorafgegaan. 8°. *Zwolle*, 1858.

Zyl, Johannis van. Theatrum machinarum universale of groot algemeen moolenboek. fol. *Amsterdam*, 1761.

Digitized by Google

LAW LIBRARY.

701

Digitized by Google

Digitized by Google

LAW LIBRARY.

Abbott (B. V.) Digest of decisions of the various courts within the United States from the earliest period till 1870. 1st series. v. 1–14. 8°. *Boston*, 1876.

——— Digest of the reports of the United States courts and of the acts of congress. 1872–1874. v. 1–6. 8°. *New York*, 1871–74.

——— and **Abbott** (A.) A collection of forms of conveyancing, contracts and legal proceedings. For the use of the legal profession, business men, and public officers in the United States, with copious instructions, explanations and authorities. 6th edition. 8°. *New York*, 1875.

——— ——— Digest of the New York statutes and reports from the earliest period to 1860. First supplement, 1863. 6 v. 8°. *New York*, 1861–63.

——— ——— A full collection of forms of practice and pleading in actions, whether for legal or equitable relief, and in special proceedings. Prepared with reference to the code of procedure of the state of New York, and adapted to the present practice in the states of Ohio, Indiana, Kentucky, Iowa, Oregon, Minnesota, Wisconsin, Missouri, Alabama, and California. With copious notes and authorities. 2 v. 8°. *New York*, 1842–46. Also, eds. 1864, 1869–71.

——— ——— Reports of cases in admiralty, argued and determined in the district court of the United States for the southern district of New York. v. 1. 8°. *Boston*, 1857.

——— ——— Reports of practice cases determined in the state of New York. 1854–1865. 19 v. 8°. *Albany*, 1855–65.

——— ——— Reports of practice cases determined in the state of New York. New series. 3 v. 8°. *New York*, 1866–68.

——— ——— A treatise upon the United States courts, and their practice, explaining the enactments by which they are controlled; their organization and powers; their peculiar jurisdiction; and the modes of pleading and procedure in them. With numerous practical forms. 2 v. 8°. *New York*, 1869–71.

Abbott (B.V.) and **Abbott** (A.)—Cont'd.

Abbott (Charles). A treatise of the law relative to merchant ships and seamen. With the notes of Mr. Justice Story, and additional annotations by J. C. Perkins. 5th Amer. from 7th English ed. 8°. *Boston*, 1846.

Adams (J.) Principles and practice of the action of ejectment and the resulting action for mesne profits. 4th ed. 8°. *Albany, New York*, 1854.

Agnew (W. F.) The law and practice relating to letters patent for inventions. 8°. *London, Manchester, Dublin*, 1874.

Alden (J. Fox). Index of reports of the decisions of the supreme court of United States. 3 v. *n. d.*

Allen (Charles). Reports of cases argued and determined in the supreme judicial court of Massachusetts. (A continuation of Gray's reports from the year 1860 to 1868.) 14 v. 8°. *Boston*, 1861–69.

Allen (O.) The duties and liabilities of sheriffs in their various relations to the public and individuals. 8°. *Albany, New York*, 1845.

American chancery digest. *See* **Wheeler** (J. D.)

American law register. v. 1–9, 1852–61. New series. v. 1–8, 1861–69. 17 v. 8°. *Philadelphia*, 1852–69.

American law review. v. 1–4, 1867–70. 8°. *Boston*, 1867–70.

American leading cases. *See* **Hare** (J. I. C.) and **Wallace** (H. B.)

American railway cases. *See* **Smith** (C.) and **Bates** (S. W.)

Angell (Joseph K.) A treatise on right of property in tide waters, and in the soil and shores thereof. 2d ed. 8°. *Boston*, 1847.

Digitized by Google

Angell (Joseph K.) A treatise on the law of assignments. 8°. *Boston*, 1835.

——— A treatise on the law of carriers of goods and passengers, by land and by water, with an appendix of statutes regulating passenger vessels and steamboats, etc. 4th ed., rev. by John Lathrop. 8°. *Boston*, 1868.

——— A treatise on the law of water courses, with an appendix, containing statutes on flowing, and forms of declarations. Revised and very much enlarged by the addition of new matter to the text and notes. 4th ed. 8°. *Boston*, 1850.

——— and **Ames** (Samuel). A treatise on the law of private corporations aggregate. 5th ed. 8°. *Boston*, 1855.

Anthon (John). The law of nisi prius, being reports of cases in the supreme court of the state of New York. 2d ed. 8°. *New York, Albany*, 1854.

Appleton (J.) The rules of evidence stated and discussed. 8°. *Philadelphia*, 1860.

Archbold (J. F.) Criminal procedure, pleading and evidence, in indictable cases, with minute directions and forms for every criminal law that can arise. 6th ed., by Thomas A. Waterman. 3 v. 8°. *New York, Albany*, 1853.

Bacon (A. O.) Digest of the decisions of the supreme court of Georgia. 8°. *Macon*, 1867.

Bacon (Matthew). A new abridgment of the law, with large additions and corrections, by Sir Henry Gwyllim and C. E. Dodd, with notes and references made to the edition of 1809, by Bird Wilson, to which are added notes and references to American law and decisions, by John Bouvier. 10 v. 8°. *Philadelphia*, 1842.

Baker (J. F.) The law of manufacturing corporations in the state of New York. 8°. *New York*, 1876.

Baldwin (H.) Reports of cases determined in the circuit court of the United States. 8°. *Philadelphia*, 1829–33.

Barbour (O. L.) *See* **Reports** of cases in the court of chancery.

——— Law of parties to actions at law, and suits in equity. 8°. *Albany*, 1864.

——— Reports of cases in law and equity in the supreme court of the state of New York. 1847–1867. 58 v. 8°. *Albany, New York*, 1848–68.

Barbour (O. L.) Treatise on the criminal law of the state of New York; duty and authority of justices of the peace, etc. 2d ed. 8°. *Albany, New York*, 1852.

——— A treatise on the law of set-off. 8°. *Albany, New York*, 1841.

——— and **Harrington** (E. B.) Analytical digest of equity cases. 4 v. *Springfield*, 1837–43.

Bateman (Newton). School laws and common school decisions of the state of Illinois. 1867.

Beavan (C.) *See* **Reports** of cases in the high court of chancery, v. 17, 29, 43.

Beck (*Drs.* T. R. and J. B.) Elements of medical jurisprudence. 11th ed., with notes by an association of the friends of Drs. Beck; the whole revised by Dr. C. R. Gilman. 2 v. 8°. *Philadelphia*, 1860.

Beitel (Calvin G.) Digest of titles of corporations chartered by the legislature of Pennsylvania, 1700–1866 inclusive. 8°. *Philadelphia*, 1867.

Benét (*Capt.* S. V.) Military law, and the practice of courts-martial. 5th ed. 8°. *New York*, 1866.

Bennett (E. H.) and **Heard** (F. F.) Digest of the decisions of the supreme court of Massachusetts; 1804–57. 2 v. 8°. *Boston*, 1862–63.

Bentley (A. J.) Opinions of E. R. Hoar, B. H. Bristow, Samuel F. Phillips, etc. *See* **Official** opinions of the attorneys general of the United States, v. 13, 14.

Bigelow (Lewis). Digest of Pickering's reports, vols. 2–7; being a supplement to the digest of previous volumes of the Massachusetts reports. 8°. *Boston*, 1830.

Bigelow (M. M.) The law of estoppel; its principles and applications. 8°. 1872.

Bingham (A.) A treatise on the law of real property. 8°. *Albany*, 1868.

Bingham (Anson) and **Colvin** (A. J.) Rents, real and personal, covenants and conditions. 8°. *Albany*, 1857.

Binns (J.) Binns' justice; or magistrate's daily companion. 4th ed. 8°. *Philadelphia*, 1851.

Bishop (Joel P.) Commentaries on the law of criminal procedure; or, pleading, evidence and practice in criminal cases. 3d ed. 2 v. 8°. *Boston*, 1865.

——— The law of marriage and divorce, of separations without divorce, and of the evidence of marriage in all issues. Em-

Digitized by Google

Bishop (Joel P.)—Continued.
bracing, also, pleading, practice and evidence in divorce causes, with forms. 2 v. [v. 1, 4th ed., 1864. v. 2, 5th ed., 1873.] 8°. *Boston*, 1864, 1873.

Bissell (J.) Cases argued and determined in the circuit and district courts of the United States. Seventh district. 6 v. 1851–76. 8°. *Chicago*, 1876.

Black (J. S.) Reports of cases, supreme court of United States. 2 v. 8°. 1861–62.

Blackford (I.) Reports of cases in the supreme court of judicature of Indiana. 1817–47. 7 v. 8°. *Indianapolis*, 1847–62.

Blackstone (*Sir* William). Commentaries on the laws of England, in four books, with notes selected from the editions of Archbold, Christian, Coleridge, Chitty, Stewart, Kerr, and others, Baron Field's analysis, and additional notes, and a life of the author, by George Sharswood. 2 v. roy. 8°. *Philadelphia*, 1876.

Blackwell (Robert S.) On tax titles. A practical treatise on the power to sell land for the non-payment of taxes, embracing the decisions of the federal courts, and of the supreme judicial tribunals of the several states. 2d ed. 8°. *Boston*, 1864.

Blatchford (S.) Reports of cases of the circuit court of United States. 13 v. 8°. *New York*, 1845–76.

—— and **Howland** (F.) Reports of cases in the district court of the United States for the southern district of New York. v. 1. 8°. *New York*, 1855.

Bond (L. H.) Reports of cases decided in the circuit and district courts of the U. S., southern district of Ohio. 2 v. 1856–71. 8°. *Cincinnati*, 1872.

Bosworth (Joseph S.) Reports of cases in the superior court of the city of New York. 10 v. 8°. *Albany*, 1859–65.

Boutwell (George S.) The organic laws of the United States of America. Declaration of independence, 1776. Articles of confederation, 1777. Ordinance for the government of territory northwest of river Ohio, 1787. Constitution, 1787. 4°. *Washington*, 1878.

Bouvier (J.) Institutes of American law. 4 v. 8°. *Philadelphia*, 1851.

—— Same. 14th ed. 4 v. 1872.

Bouvier (J.) A law dictionary, adapted to the constitution and laws of the United States of America, and of the several states of the American union; with references to the civil and other systems of foreign law. 14th ed., revised and greatly enlarged. 2 v. 8°. *Philadelphia*, 1875–77.

Bright (J. E.) Treatise on the law of husband and wife as respects property. Partly founded on Roper's treatise, and comprising Jacobs' notes and additions thereto. With American notes and references; and the statutes of each state regarding marriage, by Ralph Lockwood. 2 v. 8°. *New York, Albany*, 1850.

Brightly (F. C.) An analytical digest of the laws of the United States, from 1789 to 1869. 2 v. 8°. *Philadelphia*, 1869.

—— A digest of the decisions of the federal courts; comprising the reports of the supreme, circuit, and district courts, and the court of claims, as reported in the regular series, and also including the numerous federal cases contained in the state reports, and in the legal periodicals. 2 v. 8°. *Philadelphia*, 1868–73.

—— A digest of the laws of Pennsylvania. From 1700–1861. 4°. *Philadelphia*, 1862.

—— Equitable jurisdiction, courts of Pennsylvania. 8°. *Philadelphia*, 1855.

—— The law of costs in Pennsylvania, with fee bill and decisions of the courts. 8°. *Philadelphia*, 1847.

—— Reports of cases of the supreme court of Pennsylvania, in the court of nisi prius at Philadelphia; also in the supreme court. 8°. *Philadelphia*, 1851.

Broom (Herbert). The philosophy of the law. 8°. *New York*, 1876.

—— A selection of legal maxims. Classified and illustrated. With references to American cases. 7th Amer. from 5th London ed. 8°. *Philadelphia*, 1874.

Brown (W.) *See* **Reports** of cases in the court of chancery.

Browne (A. G.) Reports of cases in supreme court of Massachusetts. 1867–1873. 13 v. 8°. 1868–74.

—— and **Gray** (J. C.) Reports of cases in supreme court of Massachusetts. 1872–74. 8°. *Boston*, 1875.

Browne (Causten). The construction of the statute of frauds, as in force in England and the United States; with an appendix containing the existing English

Digitized by Google

Browne (Causten)—Continued.
and American statutes. 2d ed. rev. 8°. *Boston*, 1863.

Browne (Wm. H.) The law of trade-marks and analogous subjects. 8°. *Boston*, 1873.

Bump (O. F.) Fraudulent conveyances, cases both English and American. 2d ed. 8°. *New York*, 1876.

——— The law of patents, trade-marks, and copy-rights. Consisting of the sections of the revised statutes of the U. S., with notes referring to the decisions of the courts, and the commissioners of patents. With the rules of the patent office, and a selection of forms. 8°. *New York*, 1877.

Burnham (B. F.) *See* **United States** digest, v. 22.

Burrill (Alexander M.) A law dictionary and glossary, containing full definitio s of the principal terms of the common and civil law, together with translations and explanations of the technical phrases in different languages occurring in the ancient and modern reports and standard treatises; embracing also all the principal common and civil law maxims. 2d ed. 2 v. 8°. *New York*, 1859.

——— A treatise on the nature, principles and rules of circumstantial evidence, especially that of the presumptive kind in criminal cases 8°. *New York*, 1856.

——— Treatise on the practice of the supreme court of the state of New York. 2d ed. 2 v. 8°. *New York*, 1846.

Caines (G.) Reports of cases in the supreme court of the state of New York. 3d ed. 3 v. 8°. *New York, Albany*, 1854.

Caldwell (James S.) Law of arbitrations, with precedents. Second American edition, with references to American and English decisions. By Chauncey Smith. 8°. *Burlington*, 1853.

Callan (John F.) Military laws of the United States, from the foundation of the government to 3d March, 1863. 8°. *Philadelphia*, 1863.

Cases decided in the court of claims, from Dec., 1867–Dec., 1875. Ed. by C. C. Nott and S. H. Huntington, v. 3–7, 1867–72; by C. C. Nott and A. Hopkins, v. 8–11, 1873–76. [v. 1, 2, missing.] 9 v. 8°. *Washington*, 1868–77.

Cases relating to railways and canals. 1835–1852. 6 v. 8°. *Boston*, 1854.

Chancery cases. Court of appeals, South Carolina. By D. J. McCord. 2 v. 8°. *Philadelphia*, 1827–29.

Chitty (Edward). An index to all the reported cases decided in the several courts of equity in England and Ireland, the privy council, and the house of lords; and to the statutes on, or relating to, the principle, pleading, and practice of equity and bankruptcy, from the earliest period. 3d ed. brought down to 1853. 4 v. 8°. *London*, 1853.

Chitty (Joseph). A practical treatise on bills of exchange, checks on bankers, promissory notes, bankers' cash notes, and bank notes, with references to the law of Scotland, France and America. 10th Amer. ed., with notes, by O L. Barbour. 8°. *Springfield*, 1842.

——— Practical treatise on the criminal law. Notes and references by J. C. Perkins. 3 v. 8°. *New York, Albany*, 1847. Another copy. *Springfield*, 1836.

——— Treatise on pleading and parties to actions, with second volume, containing modern precedents of pleading and practical notes. 6th Amer. ed. from 5th London. 3 v. 8°. *Springfield*, 1833.

Chitty (Joseph, *jr.*) A treatise on the law of contracts, and upon the defenses to actions thereon. 5th Amer. ed. from 3d London, by T. Chitty. 8°. *Springfield*, 1842.

Clerke (Thomas W.) Rudiments of American law and practice. 8°. *New York, Albany*, 1842.

Clifford (Nathan). Reports of cases argued and determined in the circuit court of the United States for the first circuit. 2 v. 8°. *Boston*, 1869–70.

Clinton (G. W.) Digest of the decisions at law and equity of the courts of the state of New York. 3 v. 8°. *Albany*, 1852.

Coddington (C. E.) A digest of the law of trademarks, in the courts of the United States, Great Britain, Ireland, Canada and France, from the earliest period to the present time. 8°. *New York*, 1878.

Colby (John H.) The criminal law and practice in the state of New York. v. 1. (2 v.) 8°. *Albany*, 1868.

Collyer (J.) *See* **Reports** of cases in the high court of chancery, v. 28, 33.

Digitized by Google

Compilation (A) of all the treaties between the United States and the Indian tribes now in force as laws. imp. 8°. *Washington*, 1873.

Conkling (A.) A treatise on the organization, jurisdiction, and practice of the courts of the United States. 3d ed. 8°. *Albany*, 1856.

Conner (James). Digest of the cases in the court of appeals of South Carolina. June, 1835, to Dec., 1854. 8°. *Charleston*, 1855.

Conover (J. F.) Digested index of all the reported decisions in law and equity of the supreme courts of the states of Ohio, Indiana, and Illinois. With appendix. 8°. *Philadelphia*, 1834.

Cooley (Thomas M.) A treatise on the constitutional limitations which rest upon the legislative powers of the states of the American union. 8°. *Boston*, 1868.

Cord (W. H.) On the legal and equitable rights of married women. 8°. *Philadelphia*, 1861.

Cornwell (Francis E.) Digest of cases in law and equity in the court of appeals of the state of New York, 1847-59. 8°. *Albany*, 1859.

Cowen (Esek). Civil jurisdiction of justices of the peace. Treatise on the civil jurisdiction of justices of the peace, state of New York. 4th ed. 2 v. 8°. *Albany, New York*, 1854.

——— Reports of cases in the supreme court of New York. 1823-1829. 9 v. 8°. *Albany, New York*, 1835-54.

Cox (Rowland). American trade-mark cases. A compilation of all the reported trade-mark cases decided in the American courts, prior to the year 1871. With an appendix containing the latest English cases, &c. Ed. by. 8°. *Cincinnati*, 1871.

Crabbe (W. H.) Reports of cases, district court of United States for eastern district of Pennsylvania, 1836-46. 8°. *Philadelphia*, 1853.

Cranch (W.) Reports of cases civil and criminal in the U. S. circuit court, District of Columbia. 6 v. 8°. *Boston*, 1801-41.

——— Reports of cases in the supreme court of the United States. 9 v. 8°. *Philadelphia*, 1800-15.

Cruise (W.) Digest on the law of real property. 7 v. [b'd in 3 v.] 8°. *Boston, London*, 1849-50.

Curtis (Benjamin R.) Circuit court reports of cases argued and determined in the circuit court of the United States for the first circuit. 2 v. 8°. *Boston*, 1854-57.

——— The decisions of the supreme court of the United States, with notes and a digest. Comprising the cases reported by Dallas, 4 v.; Cranch, 9 v.; Wheaton, 12 v.; Peters, 16 v.; and Howard, 17 v. 21 v. 8°. *Boston*, 1856.

——— Digest of the decisions of the supreme court of the United States, from the origin of the court to the close of the December term, 1854. 8°. *Boston*, 1856.

Curtis (George T.) The American conveyancer: containing a large variety of legal forms and instruments in use throughout the United States. Together with forms and directions for applicants under the patent laws of the United States. 2d ed. rev. 8°. *Boston*, 1847.

——— The law of patents for useful inventions, as enacted and administered in the United States of America. 4th ed. rev. 8°. *Boston*, 1873.

Cushing (Luther S.) Reports of cases argued and determined in the supreme judicial court of Massachusetts. 1848-1854. 12 v. 8°. *Boston*, 1850-60.

Daniel (E. R.) Pleading and practice of the high court of chancery, adapted to the present practice of the English court, by T. E. Headlam. 3d Amer. ed., to which are added several entirely new chapters and copious notes, together with an appendix of precedents, adapting the work to American practice in chancery. By J. C. Perkins. 3 v. 8°. *Boston*, 1865.

Daniel (J. W.) The law of negotiable instruments. 2 v. 8°. *New York*, 1876.

Deady (M. P.) Reports of cases, circuit and district courts of Oregon and California. 8°. *San Francisco*, 1872.

Denio (Hiram). Reports of cases in the supreme court, and in the court for the correction of errors, 1845-1847. 5 v. 8°. *Albany, New York*, 1846-50.

Devereux (John C.) The most material part of Blackstone's commentaries reduced to questions and answers. 8°. *New York*, 1860.

Digitized by Google

Devereux (John C.) The most material part of Kent's commentaries reduced to questions and answers. 8°. *New York*, 1873.

Digest of English reports in law and equity, from v. 1-31 inclusive. By C. Smith. 31 v. 8°. *Boston*, 1857.

Digest of the court of claims reports, March, 1863–Dec., 1875. By C. C. Nott and A. Hopkins. 8°. *Washington*, 1876.

Digest of the decisions of the courts of common law and admiralty in the United States. v. 1. By Theron Metcalfe and Jonathan C. Perkins. 2. By John P. Perkins. 8°. *Boston*, 1846–47.

Dillon (J. F.) Cases determined in the United States circuit court, eighth circuit. 3 v. 8°. *Davenport, Iowa*, 1871–76.

Domat (Jean). The civil law in its natural order; together with the public law, translated into English by William Strahan; with remarks on some differences between the civil law and the law of England. Ed. by Luther S. Cushing. 4th ed. 2 v. 8°. 1850.

Drake (Charles D.) A treatise on the law of suits by attachment in the United States. Third edition, revised and enlarged, with an appendix, containing the leading statutory provisions of the several states and territories of the United States, in relation to suits by attachment. 8°. *Boston*, 1858.

Duer (J.) Reports of cases in the superior court of the city of New York. 6 v. 8°. *Albany*, 1854–58.

Dunlap (J. D.) A book of forms containing more than twelve hundred forms for practice in the courts of Pennsylvania and of the United States, and for conveyancing; also for the use of public officers and men of business generally. 4th ed. 8°. *Philadelphia*, 1857.

Dunlop (J.) Digest of the laws of the United States. 8°. *Philadelphia*, 1856.

Dunlop (J. A.) *See* **Reports** of cases, high court of chancery, v. 3, 4.

Dutcher (Andrew). Reports of cases argued in the supreme court, and the court of errors and appeals of the state of New Jersey, 1855–1857. 8°. *Trenton*, 1856–58.

Dwarris (Fortunatus). Treatise on statutes; with American notes and additions by Platt Potter. 8°. *Albany*, 1874.

East (E. H.) *See* **Reports** of cases of king's bench.

Eden (R. H.) A compendium on the law and practice of injunctions. Introduction and appendix on practical forms, by T. W. Waterman. 2 v. 8°. *New York, Albany*, 1852.

Edmonds (J. W.) Statutes at large of the state of New York, as they existed July, 1862. Ed. by. 5 v. 8°. *Albany*, 1863.

Edwards (Charles). The law and practice of referees, under the code and statutes generally, with forms. 8°. *Albany*, 1860.

——— A practical treatise on the stamp act of July 1, 1862, and amendatory statutes to July, 1862. 8°. *New York*, 1863.

——— On receivers in equity, with precedents. 2d ed. 8°. *New York*, 1839.

Edwards (Isaac). A treatise on bills of exchange and promissory notes. 2d ed. 8°. *New York, Albany*, 1863.

English railway and canal cases. Edited by C. Smith and S. W. Bates. 6 v. 8°. *Boston*, 1854.

English reports in law and equity. E. H. Bennett and C. Smith. 40 v. 8°. *Boston*, 1851–57.

Fell (W. W.) A treatise on the law of mercantile guaranties and of principal and surety in general. 2d American edition, with notes and references to American decisions, by Joseph H. Allen. 8°. *Albany*, 1859.

Fessenden (T. G.) Essay on the law of patents for inventions. 8°. *Boston, New York, Baltimore*, 1810.

Field (D. D.) International code. 2d ed. 8°. *New York, London*, 1876.

Fisher (Samuel S.) Reports of cases arising under letters patent for invention, determined in the courts of the United States from 1848–1873. 6 v. 8°. *Cincinnati*, 1867–74.

Fisher (William H.) Reports of cases relating to letters patent for inventions, determined in the supreme and circuit courts of the United States, not included in Robb's or Fisher's patent cases. v. 1, 1821–1850. 8°. *Cincinnati*, 1873.

Frost (H. W.) *See* **United States** digest, v. 19–21.

——— and **Burnham** (B. F.) *See* **United States** digest, v. 23.

Digitized by Google

Fry (Edward). A treatise on the specific performance of contracts, including those of public companies. 2d Amer. ed., with notes and references to recent English and American cases, by Wm. S. Schuyler. 8°. *Albany*, 1861.

Gallison (J.) Reports of cases of the circuit court of the United States. 2 v. 8°. *Boston*, 1845.

Gardissal (—) and **Desnos-Gardissal** (Ch.) Précis des législations française et étrangères sur les brevets d'invention et les marques de fabrique. 8°. *Paris*, 1858.

Gardner (Daniel). Institutes of international law, public and private, as settled by the supreme court of the United States, and by our republic, with reference to judicial decisions. 8°. *New York*, 1860.

Gholson (W. Y.) and **Okey** (J. W.) Digest of the Ohio reports, including the twenty volumes of Ohio reports, and the first fifteen volumes of Ohio state reports. 8°. *Cincinnati*, 1867.

Gilman (C.) Digest of the supreme courts of Indiana and Illinois, and the circuit court of the United States, for the seventh circuit. 8°. *Columbus*, 1844.

Gilpin (H.) Reports of district court of United States for eastern district of Pennsylvania, 1828–36. 8°. *Philadelphia*, 1837.

Godson (R.) Law of patents for inventions and of copyright. 8°. *London*, 1851.

Gould (James). A treatise on the principles of pleading in civil actions. 1st ed. 8°. *Boston*, 1832.

Gray (Horace). Reports of cases argued and determined in the supreme judicial court of Massachusetts, from the year 1854 to 1861. 16 v. 8°. *Boston*, 1855–71.

Greenleaf (Simon). A treatise on the law of evidence. 4th ed. 3 v. 8°. *Boston*, 1848–57.

——— Same. 13th ed. rev. by Jno. Wilder May. 1876. 3 v. *Boston*, 1876.

Hadley (Amos). Reports of cases in the supreme judicial court of New Hampshire. v. 3. 8°. *Concord*, 1869.

Haines (E. M.) On the powers and duties of justices of the peace and constables, in the state of Illinois. 4th ed. 8°. *Chicago*, 1868.

Hale (G. S.) *See* **United States** digest, v. 11 12.

——— and **Smith** (H. F.) *See* **United States** digest, v. 13.

Hall (B. F.) Opinions of Edmund Randolph, Charles Lee, William Pinckney, etc. *See* **Official** opinions of attorneys general of United States, v. 1–5.

Hall (Jona. Prescott). Reports of cases in the superior court of the city of New York. 2d ed. 2 v. 8°. *Albany*, 1866.

Halstead (J. R.) Digest of the laws of evidence, embracing the rules established by writers of acknowledged authority, and affirmed by the decisions of the federal courts, and the courts of all the states down to the present time, with copious references to English adjudications. 2 v. 8°. *New York*, 1856.

Hare (J. I. Clark) and **Wallace** (H. B.) American leading cases. Select decisions of American courts, in several departments of law, with especial reference to mercantile law. 2 v. 8°. *Philadelphia*, 1848.

——— ——— Select decisions of American courts. 2 v. 8°. *Philadelphia*, 1844.

Hare (T.) *See* **Reports** of cases in the court of chancery, v. 23, 24, 25, 26, 27, 30, 31, 32, 41.

Harrington (Burke). Reports of cases in the court of chancery of the state of Michigan. 8°. *Detroit*, 1845.

Hempstead (S. H.) Reports of cases in the U. S. superior, district and circuit courts, for the territory of Arkansas. Ninth circuit. 1836–1849. 8°. *Boston*, 1856.

Higgins (Clement). Digest of cases on the law and practice of letters-patent for inventions. 8°. *London*, 1875.

Hill (Nicholas, *jr.*) Reports of cases in the supreme court of the state of New York. 1841–1844. 7 v. 8°. *Albany, New York*, 1842–47.

Hilliard (Francis). The law of bankruptcy and insolvency; being a complete and compact view of the English and American law upon those subjects. 2d ed. 8°. *Philadelphia*, 1867.

——— The law of injunctions. 2d ed. 8°. *Philadelphia*, 1869.

——— The law of new trials, and other rehearings. 8°. *Philadelphia*, 1866.

Digitized by Google

Hilliard (Francis). A treatise on the law of mortgages of real and personal property, being a general view of the English and American law upon that subject. 3d ed. 2 v. 8°. *Boston*, 1864.

——— A treatise on the law of torts, being a comprehensive summary of the law relating to wrongs committed upon real and personal property, upon the person, character, and all absolute and relative rights, etc. 3d ed. 2 v. 8°. *Boston*, 1859–61.

Hindmarch (W. M.) The law relative to patent privileges for the sole use of inventions, and the practice of obtaining letters patent for inventions, with an appendix of forms and entries. 8°. *Harrisburg*, 1847.

Hoffman (Murray). The provisional remedies of the code of procedure. 8°. *New York*, 1862.

Holcombe (J. P.) Digest of decisions of the supreme court. 8°. *New York*, 1848.

Holcombe (James P.) Introduction to equity jurisprudence, on the basis of Story's commentaries, with notes and references to English and American cases, adapted to the use of students. 8°. *Cincinnati*, 1846.

Holmes (J.) Reports of the circuit court of the United States, from 1870–1875. 8°. *Boston*, 1877.

Hood (S.) On the law relating to executors, administrators, guardians, etc., in Pennsylvania. 8°. *Philadelphia*, 1847.

Hopkins (S. M.) *See* **Reports** of cases in the court of chancery.

Houck (Louis). The law of navigable rivers. 8°. *Boston*, 1868.

Howard (Benjamin C.) Reports of cases argued and adjudged in the supreme court of the United States. 24 v. 8°. *Boston*, 1843–61.

Howard (Nathan, *jr.*) Cases in the court of appeals of the state of New York. v. 1. 8°. *New York*, 1855.

——— Reports of cases in the supreme court and court of appeals. 1844–1866. 8°. *Albany*, 1845–68.

Howson (H.) and **Howson** (C.) A brief inquiry into the principles, effect, and present state of the American patent system. 3d ed. 8°. *Philadelphia, Washington*, 1876.

Humphrey (Charles). Precedents. A collection of practical forms in suits at law; also, precedents of contracts, conveyances, wills, etc. 2 v. 8°. *Albany, New York*, 1845.

Hurd (Rollin C.) A treatise on the right of personal liberty, and on the writ of habeas corpus, and the practice connected with it, with a view of the law of extradition of fugitives. 8°. *Albany*, 1858.

Huston (Charles). History and nature of original titles to land in the state of Pennsylvania. 8°. *Philadelphia*, 1849.

Index to the opinions of the attorneys general of the United States; 1850–1851. 8°. *Washington*, 1852.

Jarman (T.) Treatise on wills; with notes and references to American law, by J. C. Perkins. 3d Amer. ed. 2 v. 8°. *Boston*, 1855.

Johnson (William). Digest of cases in the superior court of the city of New York, the vice chancellor's court, supreme court, court of chancery, etc. 1823–1836. Being a supplement to Johnson's digest. v. 3. 8°. *Philadelphia*, 1838.

——— Digest of cases in the supreme court and the court of errors in the state of New York; 1799–1814. 8°. *Albany*, 1815.

——— Digest of cases in the supreme court, the court of chancery, and the court of errors of the state of New York; 1799–1823. 2 v. 8°. *Albany*, 1825.

——— Reports of cases in the supreme court of judicature, and in the court for the trial of impeachments, etc., in the state of New York. 2d and 3d eds. 20 v. 8°. *Philadelphia, New York, Albany*, 1839–64.

——— Reports of cases in the supreme court of the state of New York, 1798–1804. 2d ed. 3 v. 8°. *New York, Albany*, 1846–49.

Keen (B.) *See* **Reports** of cases in the high court of chancery, v. 15.

Kent (James). Commentaries on American law. 12th ed. 4 v. 8°. *Boston*, 1873.

Keyes (Wade). An essay on the learning of partial, and of future interests in chattels personal. 8°. *Montgomery, Ala.*, 1853.

Kinne (Asa). Blackstone's commentaries reduced to questions and answers. 8°. *New York*, 1838.

Lalor (T. M.) Reports of cases in the supreme court of the state of New York.

Digitized by Google

Lalor (T. M.)—Continued.
Supplement to Hill and Denio. 1842–1844. 8°. *Albany*, 1857.

Lambert (Eli). Treatise on dower. 8°. *New York, Albany*, 1834.

Lathrop (J.) Reports of cases in the supreme court of Massachusetts. 1874–1875. 3 v. 8°. *Boston*, 1875.

Law (Stephen D.) Digest of American cases relating to patents for inventions and copyrights, from 1789 to 1862; including numerous manuscript cases, decisions on appeals from the commissioners of patents, and the opinions of the attorneys general of the United States, under the patent and copyright laws, and embracing also the American cases in respect to trade marks. Arranged in chronological order, with the year in which, and the name of the judge by whom decided. 5th ed. rev. 8°. *New York*, 1877.

Law manual for notaries public and bankers. Ed. by W. B. Wedgwood and I. S. Homans. 8°. *New York*, 1867.

Law (The) reporter. Ed. by P. W. Chandler and S. H. Phillips. v. 1–10. 8°. *Boston*, 1839–48.

Law (The) times. United States courts reports. Ed. by Rowland Cox. v. 3, 4. 8°. *Washington*, 1868–70——.

Laws of the United States, relating to internal revenue. Acts of June 30, 1864, amended by subsequent acts to March 26, 1867. 8°. *Washington*, 1867.

Lectures on law; prepared principally from Kent. By a lawyer, for the use of his sons. 8°. *Albany, New York*, 1852.

Lester (W. W.) Decisions of the interior department in public land cases, and land laws passed by the congress of the United States; together with the regulations of the general land office. v. 1. 8°. *Philadelphia*, 1860.

Linn (Samuel). Analytical index of parallel reference to the cases adjudged in the courts of Pennsylvania. 8°. *Philadelphia*, 1857.

Lloyd, (B. C.) and **Goold** (F.) *See* **Reports** of cases in the high court of chancery, v. 11.

Lockwood (R.) An analytical and practical synopsis of cases argued and reversed in law and equity in the court for correction of errors of New York, 1799–1847. 8°. *New York, Albany*, 1848.

Loomis (J. V.) Laws of the common carrying trade; of marine, fire and life insurance. 8°. *New York*, 1849.

Lowell (John). Judgments delivered within the courts of the United States for the district of Massachusetts. v. 1–2. 8°. *Boston*, 1866–77.

Lube (D. G.) An analysis of the principles of equity pleadings; with notes and references to American cases, by J. D. Wheeler. 2d Amer. ed. 8°. 1846.

McAllister (Cutler). Reports of circuit court of United States for districts of California. 8°. *New York*, 1859.

McArthur (Arthur). Reports of cases in the supreme court of the District of Columbia, 1873–1876. 2 v. 8°. *Washington*, 1875–77.

McCahon (James). Reports of cases in the supreme court of the territory of Kansas. 8°. *Chicago*, 1870.

McCall (H. S.) The clerk's assistant, containing a large variety of legal forms and instruments, adapted to county and town offices, professional and business men throughout the United States; having particular reference to the middle, eastern, and western states. 3d ed. rev. 8°. *Albany*, 1872.

McCoon (W. T.) *See* **Reports** of chancery cases, New York.

McCord (D. J.) *See* **Reports** of cases in the court of chancery.

McLean (John). Reports of cases argued and decided in the circuit court of the United States, for the seventh district, from 1829 to 1855. 6 v. 8°. *Cincinnati*, 1840–66.

Marshall (J.) Reports of cases decided by, in the circuit court of the United States of Virginia and North Carolina, 1802–1833. Ed. by J. W. Brockenbrough. 2 v. 8°. *Philadelphia*, 1837.

Mason (William P.) Reports of cases in the circuit court of the United States for the first circuit, from 1816 to 1830. v. 1–5. 5 v. 8°. *Boston*, 1824–31.

Massachusetts (The) digest; being a digest of the decisions of the supreme court of Massachusetts, from 1804–57. 2 v. 8°. *Boston*, 1862–63.

Digitized by Google

Massachusetts reports. Reports of cases in the supreme judicial court of Massachusetts. 90 v. 8°. *Boston.*

Comprising:

Massachusetts reports, 17 v.
Pickering's reports, 24 v.
Metcalf's reports, 13 v.
Cushing's reports, 12 v.
Gray's reports, 16 v.
Allen's reports, 8 v.

Metcalf (Theron). Reports of cases argued and determined in the supreme judicial court of Massachusetts, from 1840 to 1849. 13 v. 8°. *Boston*, 1840–51.

Miller (—). Compilation for the use of the South Carolina law officer. 8°. *Charleston, S. C.*, 1848.

Miller (E. Spencer). Law of partition by writ, in Pennsylvania. 8°. *Philadelphia*, 1847.

Minot (G.) Digest of the decisions of the supreme court of Massachusetts; ed. by. 8°. *Boston*, 1844. Supplement. *Boston*, 1852.

Monthly (The) law reporter. v. 11–26, 1849–57. [v. 11–19 ed. by S. H. Phillips; v. 21–26 ed. by J. Lowell and S. M. Quincy. v. 20 missing.] 15 v. 8°. *Boston*, 1849–64.

Morrison (Charles R.) Digest of cases in the supreme and judicial courts of New Hampshire, 1816–66. 8°. *Concord*, 1868.

Moses (H. H.) The law of mandamus, and the practice connected with it, with an appendix of forms. 8°. *Albany*, 1866.

Mylne (J. W.) and **Craig** (R. D.) *See* **Reports** of cases in the high court of chancery, v. 13, 14, 18.

—— and **Keen** (B.) *See* **Reports** of cases, high court of chancery, v. 7, 10.

Newbury (J. S.) Reports of admiralty cases in the district courts of the United States. 8°. *New York, Albany*, 1857.

New York (The) civil and criminal justice; a treatise on the civil, criminal and special powers and duties of the justices of the peace in the state of New York. 8°. *Auburn, Buffalo*, 1853.

Norman (J. P.) Treatise on the law and practice relating to letters patent for inventions. 8°. *Philadelphia*, 1853.

Norris (W. H.), **Brown** (G. W.), and **Brune** (F. W.) Digest of the Maryland reports. 8°. *Baltimore*, 1847.

Official opinions of the attorneys general of the United States, advising the President and heads of departments. 14 v. 8°. *Washington*, 1852–75.

Olcott (E. R.) Reports of cases in the district court of the United States for the southern district of New York. 8°. *New York*, 1857.

Otto (W.) Reports of cases of the supreme court of United States. 5 v. 8°. 1876–77.

Nash (Simeon). A digest of the decisions of the supreme court of Ohio, contained in the first 20 volumes of the Ohio state reports. 8°. *Cincinnati*, 1853.

Paley (William). A treatise on the law of principal and agent, chiefly with reference to mercantile transactions; with extensive additions by J. H. Lloyd and John A. Dunlap. 4th Am. ed., with further additions by Thomas W. Waterman. 8°. *New York, Albany*, 1856.

Parker (Amasa J.) Reports on decisions of criminal cases made at term, at chambers and in the courts of oyer and terminer of the state of New York. 5 v. 8°. *Albany, New York*, 1855–65.

Parsons (A. V.) Cases in equity and at law. 2 v. 8°. *Philadelphia*, 1851.

Parsons (Theophilus). The elements of mercantile law. 2d ed. rev. 8°. *Boston*, 1862.

—— A treatise on maritime law and maritime contracts, including the law of shipping, the law of insurance, and the law and practice of admiralty. 2 v. 8°. *Boston*, 1859.

—— A treatise on the law of contracts. 5th ed. rev. 2 v. 8°. *Boston*, 1853–57.

—— A treatise on the law of shipping and the law and practice of admiralty. 2 v. 8°. *Boston*, 1869.

Paschal (George W.) The constitution of the United States, defined and carefully annotated. 12°. *Washington*, 1868.

Payne (E.) Reports of cases of the circuit court of United States. 2 v. 8°. *New York and Albany*, 1876.

Peters (Richard). Condensed reports of cases before the supreme court of the United States. 2d ed. v. 2–6. 8°. *Philadelphia*, 1827–41.

—— Digest of the decisions of the courts of the United States. 2 v. 8°. *Philadelphia*, 1848.

—— Reports of cases in the circuit court of the United States, third circuit. 8°. *Philadelphia*, 1803–18.

—— Reports of cases in the supreme court, U. States. 17 v. 8°. *Philadelphia*, 1827–45.

Digitized by Google

Phillips (P.) The statutory jurisdiction and practice of the supreme court of the United States, together with forms of process and rules established for the supreme court, the court of claims, the courts of equity, admiralty and bankruptcy. 2d ed. 8°. *Washington*, 1874.

Phillips (S. March). A treatise on the law of evidence, with notes by E. Cowen and N. Hill, and additional notes and references to English and American cases by J. M. Van Cott. 3d Am. ed. 5 v. 8°. *New York*, 1849.

Phillips (T. J.) *See* **Reports** of cases in the high court of chancery, v. 19, 22.

Phillips (Willard). Law of patents for inventions; patent rights. 8°. *Boston, New York*, 1837.

——— A treatise on the law of insurance. 4th ed. 2 v. 8°. *Boston*, 1867.

Pickering (Octavius). Massachusetts reports. Reports of cases in the supreme judicial court of Massachusetts from 1822 to 1840. 24 v. 8°. *Boston.*

Potter (Platt). Treatise on statutes. *See* **Dwarris** (F.)

Powell (T. W.) The law of appellate proceedings, in relation to review, error, appeal, and other reliefs upon final judgments. 8°. *Philadelphia*, 1872.

Price (Eli K.) Limitation of actions and of liens, on real estate, in Pennsylvania. 8°. *Philadelphia*, 1857.

Public statutes at large of the United States of America from the organization of the government, 1789–1845, etc. 18 v. 8° *Boston*, 1845–77.

Puterbaugh (S. D.) Common law pleading and practice. A practical treatise on the forms of common law actions, pleading, and practice now in use in the state of Illinois. 2d ed. 8°. *Chicago*, 1867.

Putnam (J. P.) *See* **United States** digest, v. 1–10.

Quincy (Josiah, *jr.*) Reports of cases argued and adjudged in the superior court of judicature, in the province of Massachusetts, from 1761 to 1772. Printed from his original manuscripts, in the possession of his son, Josiah Quincy, and edited by his great-grandson, Samuel M. Quincy, of the Boston bar. 8°. *Boston*, 1865.

Ram (James). The science of legal judgment, with American notes. 8°. *New York*, 1871.

Ray (*Dr.* Isaac). Medical jurisprudence of insanity. 4th ed., much enlarged. 8°. *Boston*, 1860.

Redfield (Isaac F.) The law of railways; embracing corporations, eminent domain, contracts, common carriers of goods and passengers, telegraph companies, constitutional law, investments, etc. 4th ed., greatly enlarged. 2 v. 8°. *Boston*, 1858.

——— The law of wills. v. 1. Embracing the jurisprudence of insanity; the making and construction of wills, and the effect of extrinsic evidence upon such construction; with forms and instructions for preparing wills. 3d ed. 8°. *Boston*, 1869.

Reeve (Tapping). The law of baron and femme, of parent and child, guardian and ward, master and servant, and of the powers of the courts of chancery; with an essay on the terms, heir, heirs, heirs of the body. Third edition, with notes and references to English and American cases, by A. J. Parker and C. E. Baldwin. 3d ed. 8°. *Albany*, 1862.

Reports of cases, court of chancery, Michigan. By H. Walker. 1 v. 8°. *Detroit*, 1845.

Reports of cases, court of chancery of New York. By W. Johnson. 3 v. 8°. *Albany*, 1816–19.

Reports of cases, high court of chancery. 43 v. 8°. *New York*, 1843–57.

Reports of cases, high court of chancery. By W. Brown. 4 v. 8°. *Boston*, 1844.

Reports of cases in chancery. By J. P. Stockton. 2 v. *Trenton*, 1858.

Reports of cases in the court of chancery, N. Y. By O. L. Barbour. 3 v. 8°. *New York & Albany*, 1847–49.

Reports of cases in the high court of chancery. By Francis Vesey. 19 v. 8°. *Boston*, 1844.

Reports of cases of the court of chancery. By S. M. Hopkins. 8°. *New York*, 1824.

Reports of cases of the court of king's bench. By E. H. East. 8 v. 8°. *Philadelphia*, 1845.

Reports of chancery cases, state of New York. By W. T. McCoon. v. 3–4. 8°. *New York*, 1843–51.

Revised statutes of the United States. District of Columbia and post roads. 4°. *Washington*, 1875.

Digitized by Google

Revised statutes of the United States from 1873-74. Appendix. 4°. *Washington*, 1875.

Reynolds (D.) A treatise on the law of life assurance. 8°. *Albany, New York*, 1853.

Rice (William). Digest of cases in the superior courts of law in South Carolina. 2 v. 8°. *Charleston*, 1838.

Robb (James B.) A collection of patent cases decided in the supreme and circuit courts of the United States, from their organization to the year 1850, with notes, index, etc. 2 v. 8°. *Boston*, 1854.

Robertson (Anthony L.) Reports of cases in the superior court of the city of New York. 4 v. 8°. *Albany*, 1867-68.

Robinson (Conway). The practice in courts of justice in England and the United States. 5 v. 8°. *Richmond*, 1854-68.

Russel (James.) *See* **Reports** of cases in the high court of chancery, v. 5.

—— and **Mylne** (J. W.) *See* **Reports** of cases high court of chancery, v. 11.

Russell (W. O.) and **Greaves** (C. S.) Treatise on crimes and misdemeanors. 5th Amer. ed., from 3d London ed. 2 v. 8°. *Philadelphia*, 1845.

Sandford (Lewis H.) Reports of cases in the superior court of the city of New York. 5 v. 8°. *New York, Albany*, 1849-53.

Sanger (G. P.) Tables of cases contained in United States digest. 2 v. 8°. *Boston*, 1849.

Sawyer (E. B.) Reports of cases in the circuit and district courts. Ninth circuit. 2 v. 8°. *San Francisco*, 1873-75.

Sedgwick (Theodore). A treatise on the measure of damages; or, an inquiry into the principles which govern the amount of pecuniary compensation awarded by courts of justice. 2d ed., rev. by Henry Sedgwick. 8°. *New York*, 1852.

—— A treatise on the rules which govern the interpretation and application of statutory and constitutional law. 8°. *New York*, 1857.

Selwyn (William). An abridgment of the law of nisi prius. With notes and references to the decisions of the courts of this country, by the former editors, Henry Wheaton, Thomas L. Wharton, and E. E. Law; with additional notes and references, by A. J. Fish. 5th Am. ed., from

Selwyn (William)—Continued.
9th London ed. 2 v. 8°. *Philadelphia*, 1839.

Sergeant (T.) A treatise upon the law of Pennsylvania relative to the proceeding by foreign attachment, etc. 8°. *Philadelphia*, 1840.

Shelford (L.) Law of railways. Containing the whole of the statute law for the regulation of railways in England, Scotland and Ireland, with notes of decisions. 2 v. 8°. *London*, 1869.

—— The same. 1st Amer. ed. from 3d London ed. 2 v. *Burlington*, 1855.

Simonds (W. E.) The law of design patents, containing all reported decisions of the United States courts and the patent office in design cases, to 1874, with digest and treatise. 8°. *New York*, 1874.

Simons (N.) *See* **Reports** of cases in the high court of chancery, v. 2, 16, 34-40, 42.

Simons (Nicholas) and **Stuart** (John). *See* **Reports** of cases, high court of chancery, v. 1.

Smedes (W. C.) Digest of cases in the high court of errors and appeals and the court of chancery, of the state of Mississippi; 1818-47. 8°. *Boston*, 1847.

Smith (Chauncey) and **Bates** (Samuel W.) American railway cases. A complete collection of the American cases relating to the rights, duties and liabilities of railroads, with notes and references to the English and American railway, canal and turnpike cases, by Chauncey Smith and Samuel W. Bates. 2 v. 8°. *Boston*, 1854-56.

Smith (E. Fitch). *See* **Reports** of cases high court of chancery, v. 8.

—— Commentaries on statute and constitutional law, and statutory and constitutional construction. 8°. *Albany, New York*, 1848.

Smith (H. F.) *See* **United States** digest, v. 14-18.

Smith (John W.) A selection of leading cases on the various branches of the law. 6th Amer. from the 3d London ed., with notes and references to American decisions, by J. I. Clark Hare and John Wallace. 2 v. in 3. 8°. *Philadelphia*, 1847.

Smith (P. Frazer). Pennsylvania state reports. v. 3, 4. 8°. *Philadelphia*, 1868.

Digitized by Google

Sprague (Peleg). Decisions in admiralty and maritime cases in the district court of the United States for the district of Massachusetts. 1841–1861. 8°. *Philadelphia*, 1861.

Starkie (Thomas). A practical treatise on the law of evidence. 8th Amer. from the 4th London ed., by G. M. Dowdeswell and J. G. Malcolm. With notes and references to American cases, by Geo. Sharswood, together with notes to former Amer. eds., by T. Metcalf, E. D. Ingraham and B. Gerhard. 8°. *Philadelphia*, 1869.

Stephen (Henry J.) A treatise on the principles of pleading in civil actions; comprising a summary view of the whole proceedings in a suit at law. 9th Amer. ed., with notes and additions from the London editions, by F. F. Heard. 8°. *Philadelphia*, 1867.

Stockett (J. S.), **Merrick** (R. T.), and **Miller** (O.) Digest of the Maryland reports. 8°. *Baltimore*, 1857.

Stockton (J. P.) *See* **Reports** (in chancery) of cases in the court of chancery.

Story (Joseph). Commentaries on equity jurisprudence, as administered in England and America. 9th ed., rev. by I. F. Redfield.. 2 v. 8°. *Boston*, 1836. Also eds. 1837, 1839.

——— Commentaries on equity pleadings, and the incidents thereto, according to the practice of the courts of equity of England and America. 6th ed. 8°. *Boston*, 1857.

——— Commentaries on the conflict of laws, foreign and domestic, in regard to contracts, rights and remedies, and especially in regard to marriage, divorces, wills, successions and judgments. 6th ed., rev. by I. F. Redfield. 8°. *Boston*, 1865.

——— Commentaries on the constitution of the United States, with a preliminary review of the constitutional history of the colonies and states before the adoption of the constitution. 3d ed. 2 v. 8°. *Boston*, 1858.

——— Commentaries on the law of agency as a branch of commercial and maritime jurisprudence, with occasional illustrations from the civil and foreign law. 6th ed., rev. by Edmund H. Bennett. 8°. *Boston*, 1863.

——— Commentaries on the law of bailments, with illustrations from the civil and foreign law. 6th ed. 8°. *Boston*, 1856.

——— Commentaries on the law of bills of exchange, foreign and inland, as administered in England and America, with occasional illustrations from the commercial law of the nations of continental Europe. 2d ed. 8°. *Boston*, 1847. 4th ed. *London*, 1860.

——— Equity jurisprudence, as administered in England and America. 9th ed., rev. by I. F. Redfield. 2 v. 8°. *Boston*, 1866.

——— The law of partnership, as a branch of commercial and maritime jurisprudence, with occasional illustrations from the civil and foreign law. 4th ed., rev. by J. C. Gray, jr. 8°. *Boston*, 1855.

——— The law of promissory notes and guaranties of notes and checks on banks and bankers, with occasional illustrations from the commercial law of the nations of continental Europe. 8°. *Boston, London*, 1845.

——— A selection of pleadings in civil actions, with occasional annotations. 2d ed., with additions, by Benjamin C. Oliver, jr. 8°. *Salem*, 1805.

Story (W. W.) The law of contracts. 4th ed. 2 v. 8°. *Boston*, 1856.

——— The law of sales of personal property, with illustrations from the foreign law. 8°. *Boston, London*, 1847.

——— Reports of cases argued and determined in the circuit court of the United States for the first circuit. 3 v. 8°. *Boston*, 1842–47.

Sugden (*Sir* Edward). Practical treatise on the law of vendors and purchasers of estates. 7th Amer. from the 10th London ed., with notes and references by J. C. Perkins. 3 v. in 2. 8°. *Springfield*, 1851.

Sumner (C.) Reports of the circuit court of the United States. 3 v. 8°. *Boston*, 1836–41.

Taney (R. B.) Reports of cases in law and equity, and in the admiralty, in the circuit court of the United States, Maryland. 8°. *Philadelphia*, 1871.

Tayler (Thomas). Law glossary, being a selection of the Greek, Latin, Saxon, French, Norman and Italian sentences, phrases and maxims found in the leading English and American reports and

Digitized by Google

Tayler (Thomas)—Continued.
elementary works. 9th ed. 8°. *New York*, 1871.

Taylor (John N.) A treatise on the American law of landlord and tenant, embracing the statutory provisions and judicial decisions of the several United States in reference thereto, with a selection of precedents. 8°. *New York*, 1844.

Thompson (I. G.) The law and practice of provisional remedies, with an appendix of forms. 8°. *Albany, New York*, 1867.

——— A practical treatise on the law of highways, with an appendix of forms. 8°. *Albany*, 1868.

Tiffany (Joel) and **Bullard** (E. F.) The law of trusts and trustees, as administered in England and America, embracing the common law; together with the statute laws of the several states of the union, and the decisions of the courts thereon. 8°. *Albany*, 1862.

Tillinghast (J. L.) and **Yates** (J. V. N.) Principles and practice, process, pleadings, and entries, in cases of writs of error, etc. [2 v.] v. 1. 8°. *New York, Albany*, 1840.

Townshend (J.) Code of procedure, in the state of New York, as amended to 1859. 6th ed. 8°. *New York*, 1859.

Troubat (F. J.) The law of commandatary and limited partnership in the United States. 8°. *Philadelphia*, 1853.

——— and **Haly** (W. W.) The practice in civil actions and proceedings in the courts of Pennsylvania. 4th ed. 2 v. 8°. *Philadelphia*, 1867.

Turner (I.) and **Russel** (—) and others. *See* **Reports** of cases in the high court of chancery, v. 12.

Tyler (Ransom H.) Commentaries on the law of infancy, including guardianship and custody of infants, and the law of coverture, embracing dower, marriage and divorce, and the statutory policy of the several states in respect to husband and wife. 8°. *Albany*, 1868.

United States digest. Being a digest of decisions of the courts of common law, equity, and admiralty, of the United States. By J. P. Putnam and others. v. 1–23, 1847–69. New series, v. 1–7, 1870–76. 8°. *Boston*, 1848–76.

Upton (Francis H.) A treatise on the law of trade marks, with a digest and review of the English and American authorities. 8°. *Albany*, 1860.

Upton (Francis H.)—Continued.

Vesey (Francis). *See* **Reports** of cases in high court of chancery.

Virgin (W. Wirt). Digest of the decisions of the supreme judicial court of the state of Maine. 8°. *Hallowell*, 1859.

Vollintine (H.) Digest of the decisions of the supreme court of errors and appeals of the state of Tennessee. 8°. *Philadelphia*, 1858.

Walker (H.) *See* **Reports** of cases, court of chancery, Michigan.

Wallace (J. B., *jr.*) Reports of cases of the circuit court of the United States. Third circuit. 3 v. 8°. 1842–62.

Wallace (J. W.) Cases argued and adjudged in the supreme court of the United States. 23 v. 8°. *Washington*, 1864–74.

Ware (Ashur). Reports of cases argued and determined in the district court of the United States for the district of Maine. 1822–39. Revised and corrected by the author. 8°. *Boston*, 1856.

Washburn (Emory). A treatise on the American law of real property. 2d ed. 2 v. 8°. *Boston*, 1864.

Washburn (P. T.) Digest of cases in the supreme court of Vermont. 8°. *Woodstock*, 1845.

Washington (B.) Reports of cases of the circuit court, United States. 4 v. 8°. 1823–27.

Webster (Thomas). Reports and notes of cases on letters patent for inventions. 2 v. 8°. *London*, 1844.

Wendell (J. L.) Reports of cases in the supreme court of judicature of the state of New York, 1828–41. 2d ed. 26 v. *Albany, New York*, 1842–53.

Wharton (Francis). Precedents of indictments and pleas. 8°. *Philadelphia*, 1849.

——— A treatise on the criminal law of the United States, embracing pleading and evidence, offenses against person, property, society and government; trial and its incidents. 5th rev. ed. 2 v. 8°. *Philadelphia*, 1861.

——— A treatise on the law of homicide in the United States, to which is appended a series of leading cases. 8°. *Philadelphia*, 1855.

Wheaton (Henry). Elements of international law. 2d ed., revised, annotated,

Digitized by Google

Wheaton (Henry)—Continued.
and brought down to the present time, with notes, by R. H. Dana, jr. 8°. *Boston*, 1863.

——— Reports of cases before the U. S. supreme court. 12 v. 8°. 1816–27.

Wheeler (Jacob D.) American chancery. Digest of reported decisions in equity, in U. S. courts. 2d ed. 2 v. 8°. *New York*, 1841.

White (F. T.) and **Tudor** (O. D.) A selection of leading cases in equity, with notes; and with additional annotations and notes, containing references to American cases, by J. I. Clark Hare and H. B. Wallace. 3 v. in 4. 3d Amer. from 2d London ed., 1859. 8°. *Philadelphia*, 1876.

Whitman (C. S.) Patent cases determined by the supreme court of the United States, including copyright and trademark cases, which have been cited, affirmed, or reversed, from 1 Black to 20 Wallace. 1861–1874. 8°. *Washington*, 1875.

Whitman (C. S.) Patent laws and practice of obtaining letters patent for inventions in the United States and foreign countries, including copyright and trademark laws. 8°. *Washington*, 1871.

Williams (E.) Reports of cases in the supreme court of Massachusetts. 17 v. 1804–1822. 8°. *Boston*.

Woodbury (C. L.) and **Minot** (George). Reports of cases argued and determined in the circuit court of the United States for the first circuit. 3 v. 8°. *Boston*, 1847–52.

Woods (W. B.) Reports of cases in the circuit court of the United States. Fifth circuit. 2 v. 8°. *Chicago*, 1875–76.

Wythe (George). Decisions of cases in Virginia, by the high court of chancery, with remarks upon decrees by the court of appeals. 8°. *Richmond*, 1852.

Younge (E.) and **Collyer** (J.) *See* **Reports** of cases in the high court of chancery, v. 20, 21.

END.

Digitized by Google

Digitized by Google

Digitized by Google

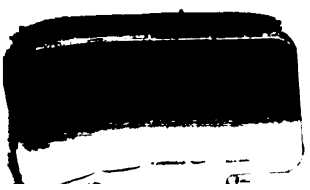
Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google

Digitized by Google



Digitized by Google

Digitized by Google